August 2009 PASS Standard Setting Technical Report

Submitted to the
South Carolina Education Oversight Committee

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Prepared by
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1. Executive Summary

A Bookmarking meeting to set academic achievement level cutscores for grades 3 through 8 in reading and research, mathematics, writing, science and social studies for the South Carolina Palmetto Assessment of State Standards (PASS) was held on August 2 -7, 2009 in Columbia, South Carolina. The purpose of the meeting was to recommend cut scores that will be used to place students into one of five achievement levels: Not Met 1, Not Met 2, Met, Exemplary 4 and Exemplary 5[1]. These achievement levels will be utilized by both state and federal accountability programs. In South Carolina, the Met and Exemplary achievement levels are used for the No Child Left Behind (NCLB) adequate yearly progress (AYP) proficiency goal which requires annual progress in terms of the percents of students falling into the Met category or above.

One hundred forty-five educational stakeholders from South Carolina participated in recommending cut scores for PASS. Committee members were selected to span grades 3 through 8. The standard setting method known as the Bookmark procedure (Lewis, Mitzel, & Green, 1996) was employed, the same procedure used in 1999 for the Palmetto Achievement Challenge Tests (PACT) in English language arts (ELA) and mathematics and for the PACT science and social studies assessments in 2003.

This report leads with the end result of the Bookmark meeting: the final, EOC-approved cutscores. What follows is information, processes, and reference materials that were used that led to this decision. These include:

- Background of the PASS
- Purpose and objectives of the meeting
- Explanation of the Bookmark method
- Panelists' recommendations
- Articulation of results across grades
- Comparative data (provided to the EOC to inform their decision making process)

At the conclusion of the Bookmark meeting, and subsequent to EOC deliberation and public comment at both the subcommittee and full committee meetings, the EOC approved cutscores with the following conditions:

- For the four assessments that are in common between the PACT and PASS (reading, mathematics, social studies, and science), the EOC approved setting the PASS Met cutscore to match the PACT Basic cutscore. For three of the four (reading, mathematics, and science, the caveat was that this cutscore not deviate more than one standard error of measurement (SEM) from the Panelists' Recommendations after post-smoothing, with the SEM defined as the conditional standard errors at the cutscores. For social studies, values beyond one SEM were approved (see Table 1.1.5, far right column). DRC applied a post-smoothing process to the Panelists' recommendations to achieve more consistency across grades. This was accomplished without making the cutscores either higher or lower overall (see section 4.3).
- For reading, mathematics, and science, the EOC approved the post-smoothed Panelists' Recommendations for the Not Met 2, Exemplary 4, and Exemplary 5 cutscores.

[1] The panelists made their judgments for the Exemplary 5 cutscores on the final day of the meeting, after cutscores for Not Met 2, Met, and Exemplary 4 were already established.

- For writing, the EOC accepted the post-smoothed Panelists' Recommendations for the Not Met 2 and Met cutscores. The Exemplary 4 and Exemplary 5 cutscores were adjusted lower (easier) by .5 SEs on the request of the EOC to better match reading.

1.1 EOC Approved Cutscore Summary

Tables 1.1 to 1.5 display the final approved EOC cutscores in two metrics: one, in logits (mathematically derived values used by psychometricians to precisely measure student achievement), and two, in raw scores. In addition, the percent of students that would be categorized into each of the five achievement levels using 2009 PASS spring data is displayed. In the last column, the differences between the EOC approved Met cutscores and the panelists' recommendation (after post-smoothing) is quantified in the logit metric in terms of the proportion of conditional standard error (see sections 4.3 and 5.1 for an explanation of how these values are used in the Bookmark meeting as well as in the EOC's decision-making process). Values below zero indicate where the EOC-approved cutscores were lower (easier) than the ones from the post-smoothed panelists' recommendations; the converse is true for values above zero. Note that, as stated in the executive summary (see above), no value exceeded one standard error. The exception was for social studies, which were significantly higher than the one SE threshold. This was in part the rationale for the EOC delaying introducing new cutscores in social studies. For writing, no comparison is provided given that there was no PACT referent to the PASS.

Table 1.1.1 EOC Results: Reading

	Cutscore				Raw Score					Percent in each Achievement Level						SE
Grade	NM1/NM 2	NM2/M	M/Ex4	Ex4/Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Met and Above	Approved minus Post-smoothed (Met)
3	-1.1664	-0.3482	0.6177	0.9822	0-9	10-15	16-22	23-24	25-36	5.1	18.1	31.6	9.8	35.4	76.8	-1.00
4	-0.4880	0.2886	1.5690	2.1114	0-14	15-19	20-28	29-31	32-36	10.4	15.1	39.1	16.9	18.5	74.5	-0.22
5	-0.3970	0.1240	1.4060	1.7844	0-15	16-19	20-28	29-31	32-38	9.6	10.3	44.9	18.1	17.1	80.1	-0.36
6	-0.3750	0.3580	1.3760	1.8340	0-16	17-22	23-30	31-33	34-40	10.8	17.4	39.8	16.4	15.6	71.8	0.13
7	-0.2579	0.4746	1.4327	1.9122	0-19	20-26	27-35	36-38	39-45	14.4	16.8	38.1	15.7	15.0	68.8	0.41
8	-0.2470	0.3749	1.3755	1.9540	0-22	23-28	29-37	38-41	42-50	15.1	17.3	38.9	16.2	12.5	67.6	0.07

Table 1.1.2 EOC Results: Writing

	Cutscore				Raw Score					Percent in each Achievement Level					
Grade	NM1/NM2	NM2/M	M/Ex4	Ex4/Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Met and Above
3	-1.2524	-0.0641	0.7641	1.3517	0-17	18-29	30-36	37-41	42-55	5.7	25.4	29.4	20.6	18.9	68.9
4	-1.1942	0.0956	1.2678	1.7707	0-21	22-32	33-41	42-44	45-55	5.1	24.9	39.5	12.6	17.9	70.0
5	-1.1808	-0.1297	0.9117	1.6353	0-21	22-31	32-39	40-44	45-55	5.8	21.1	38.2	20.5	14.4	73.1
6	-1.2075	0.0086	1.2008	1.7734	0-20	21-32	33-42	43-46	47-55	5.0	24.8	40.6	13.9	15.7	70.2
7	-1.0041	0.2088	1.2923	1.8851	0-21	22-33	34-43	44-47	48-55	4.6	25.4	40.2	13.7	16.1	70.0
8	-0.9143	0.3667	1.4311	1.9677	0-24	25-35	36-44	45-48	49-55	5.1	26.8	42.2	14.5	11.4	68.1

Table 1.1.3 EOC Results: Mathematics

	Cutscore				Raw Score					Percent in each Achievement Level						SE
Grade	NM1/NM2	NM2/M	M/Ex4	Ex4/Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Met and Above	Approved minus Post-smoothed (Met)
3	-0.4640	0.2747	1.2070	1.7346	0-20	21-27	28-37	38-41	42-50	14.3	18.8	35.8	14.7	16.4	66.9	0.32
4	-0.6010	-0.1802	1.1030	1.7550	0-21	22-25	26-40	41-45	46-56	14.2	9.3	45.3	14.6	16.6	76.5	-0.58
5	-0.7323	-0.2870	0.9670	1.5833	0-20	21-24	25-39	40-44	45-56	15.7	10.7	45.7	13.2	14.7	73.6	-0.44
6	-0.5342	-0.1445	1.1339	1.6622	0-23	24-28	29-44	45-50	51-61	17.6	11.9	42.4	14.5	13.5	70.4	-0.25
7	-0.5581	-0.2552	0.8011	1.5210	0-23	24-26	27-41	42-48	49-61	21.4	9.0	42.9	14.1	12.5	69.6	-0.10
8	-0.6836	-0.3851	0.8370	1.3960	0-21	22-25	26-42	43-49	50-63	25.2	12.0	39.2	12.0	11.6	62.8	0.01

Table 1.1.4 EOC Results: Science

	Cutscore				Raw Score					Percent in each Achievement Level						SE
Grade	NM1/NM2	NM2/M	M/Ex4	Ex4/Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Met and Above	Approved minus Post-smoothed (Met)
3	-0.7839	0.3864	1.3042	1.5940	0-15	16-25	26-34	35-36	37-45	7.9	30.5	43.1	7.6	10.9	61.6	0.20
4	-0.3920	0.3483	1.9090	2.2100	0-18	19-26	27-37	38-39	40-45	11.7	19.6	53.1	7.4	8.2	68.7	0.00
5	-0.5619	0.0023	1.3036	1.6977	0-18	19-24	25-37	38-40	41-50	11.9	19.8	54.1	7.8	6.4	68.3	-0.30
6	-0.5620	0.2143	1.5880	1.9489	0-20	21-29	30-44	45-47	48-55	12.4	23.5	49.8	7.7	6.6	64.1	0.01
7	-0.4770	0.0463	1.2260	1.6389	0-21	22-27	28-41	42-45	46-55	14.1	14.6	49.0	12.4	9.9	71.3	0.28
8	-0.5540	0.1493	1.1085	1.5110	0-22	23-31	32-44	45-48	49-60	14.5	23.0	40.1	11.0	11.4	62.5	1.01

Table1 1.1.5 EOC Results: Social Studies

	Cutscore				Raw Score					Percent in each Achievement Level						SE
Grade	NM1/NM2	NM2/M	M/Ex4	Ex4/Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Met and Above	Approved minus Post-smoothed (Met)
3	-.6539	-.2441	0.8797	1.4350	0-15	16-19	20-31	32-35	36-45	13.2	12.3	43.2	14.1	17.2	74.5	-1.9
4	-.7210	-.5319	0.7877	1.2653	0-16	17-18	19-33	34-38	39-50	13.4	6.8	52.1	12.8	14.9	79.8	-2.4
5	-.6364	-.0797	1.0298	1.2942	0-17	18-23	24-35	36-38	39-50	12.7	17.2	42.5	10.6	17.0	70.1	-2.1
6	-.7724	-.5166	0.7753	1.0771	0-17	18-20	21-37	38-40	41-55	11.7	8.6	55.7	7.6	16.4	79.7	-3.4
7	-.8927	-.1363	0.7869	1.1308	0-17	18-27	28-40	41-44	45-60	11.5	28.1	32.5	9.2	18.7	60.4	-2.1
8	-.8269	-.3584	0.5683	0.8799	0-18	19-24	25-37	38-41	42-60	12.7	17.5	40.4	11.3	18.1	69.8	-2.2

1.2 Panelists' Recommendations

Tables 1.2.1 to 1.2.5 display the panelists' recommended cutscores after applying post-smoothing with the same information as given for the above five tables with one exception: the standard error column is not repeated. In addition to the information showing the differences between the post-smoothed panelists' recommendations and the final EOC-approved cutscores in proportions of standard errors, above, one may also benefit by reviewing corresponding entries in the same subject tables (e.g., for reading and research, compare Tables1.1.1 and 1.2.1).

Table1.2.1: Panelists' Recommended Post-smoothed Cutscores in the Scale Score Metric and Percents of Students Within each Performance Level: Reading and Research

	Cutscore				Raw Score					Percent in each Achievement Level					
Grade	NM1/NM2	NM2/M	M/Ex4	Ex4/Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Met and Above
3	-0.7740	0.0223	1.0030	1.3960	0-12	13-17	18-24	25-27	28-36	12.8	18.6	33.2	14.7	20.7	68.6
4	-0.4880	0.3690	1.5690	2.1114	0-14	15-20	21-28	29-31	32-36	10.4	18.8	35.4	16.9	18.5	70.8
5	-0.3970	0.2550	1.4060	1.7844	0-15	16-21	22-28	29-31	32-38	9.6	17.7	37.5	18.1	17.1	72.7
6	-0.3750	0.3130	1.3760	1.8340	0-16	17-22	23-30	31-33	34-40	10.8	17.4	39.8	16.4	15.6	71.8
7	-0.2579	0.3420	1.4327	1.9122	0-19	20-25	26-35	36-38	39-45	14.4	13.9	41.0	15.7	15.0	71.7
8	-0.2470	0.3520	1.3755	1.9540	0-22	23-28	29-37	38-41	42-50	15.1	17.3	38.9	16.2	12.5	67.6

Table 1.2.2: Panelists' Recommended Post-smoothed Cutscores in the Scale Score Metric and Percents of Students Within each Performance Level: Writing

	Cutscore				Raw Score					Percent in each Achievement Level Impacts					
Grade	NM1/NM2	NM2/M	M/Ex4	Ex4/Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Met and Above
3	-1.2524	-0.0641	0.9359	1.5340	0-17	18-29	30-38	39-43	44-55	5.7	25.4	38.3	17.5	13.1	68.9
4	-1.1942	0.0956	1.4652	1.9790	0-21	22-32	33-42	43-45	46-55	5.1	24.9	44.0	11.7	14.3	70.0
5	-1.1808	-0.1297	1.0980	1.8316	0-21	22-31	32-41	42-45	46-55	5.8	21.1	47.7	13.8	11.6	73.1
6	-1.2075	0.0086	1.3802	1.9800	0-20	21-32	33-43	44-48	49-55	5.0	24.8	44.4	15.6	10.2	70.2
7	-1.0041	0.2088	1.4769	2.1004	0-21	22-33	34-45	46-49	50-55	4.6	25.4	47.5	12.2	10.3	70.0
8	-0.9143	0.3667	1.6181	2.1860	0-24	25-35	36-45	46-49	50-55	5.1	26.8	46.3	13.3	8.5	68.1

Table 1.2.3: Panelists' Recommended Post-smoothed Cutscores in the Scale Score Metric and Percents of Students Within each Performance Level: Mathematics

	Cutscore				Raw Score					Percent in each Achievement Level					
Grade	NM1/NM2	NM2/M	M/Ex4	Ex4/Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Met and Above
3	-0.4640	0.1776	1.2070	1.7346	0-20	21-26	27-37	38-41	42-50	14.3	15.7	38.9	14.7	16.4	70.0
4	-0.6010	-0.0113	1.1030	1.7550	0-21	22-28	29-40	41-45	46-56	14.2	17.4	37.2	14.6	16.6	68.4
5	-0.7323	-0.1570	0.9670	1.5833	0-20	21-26	27-39	40-44	45-56	15.7	16.5	39.9	13.2	14.7	67.8
6	-0.5342	-0.0770	1.1339	1.6622	0-23	24-29	30-44	45-50	51-61	17.6	14.3	40.1	14.5	13.5	68.1
7	-0.5581	-0.2290	0.8011	1.5210	0-23	24-27	28-41	42-48	49-61	21.4	12.1	39.8	14.2	12.5	66.5
8	-0.6836	-0.3877	0.8370	1.3960	0-21	22-25	26-42	43-49	50-63	25.2	12.0	39.2	12.0	11.6	62.8

Table 1.2.4: Panelists' Recommended Post-smoothed Cutscores in the Scale Score Metric and Percents of Students Within each Performance Level: Science

	Cutscore				Raw Score					Percent in each Achievement Level					
Grade	NM1/NM2	NM2/M	M/Ex4	Ex4/Ex 5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Met and Above
3	-0.7839	0.3210	1.3042	1.5940	0-15	16-25	26-34	35-36	37-45	7.9	30.5	43.1	7.6	10.9	61.6
4	-0.3920	0.3483	1.9090	2.2100	0-18	19-26	27-37	38-39	40-45	11.7	23.3	49.4	7.4	8.2	65.0
5	-0.5619	0.0920	1.3036	1.6977	0-18	19-25	26-37	38-40	41-50	11.9	23.9	50.0	7.8	6.4	64.2
6	-0.5620	0.2116	1.5880	1.9489	0-20	21-29	30-44	45-47	48-55	12.4	23.5	49.8	7.7	6.6	64.1
7	-0.4770	-0.0340	1.2260	1.6389	0-21	22-27	28-41	42-45	46-55	14.1	14.6	49.0	12.4	9.9	71.3
8	-0.5540	-0.1250	1.1085	1.5110	0-22	23-28	29-44	45-48	49-60	14.5	14.5	48.6	11.0	11.4	71.0

Table 1.2.5: Panelists' Recommended Post-smoothed Cutscores in the Scale Score Metric and Percents of Students Within each Performance Level: Social Studies

	Cutscore				Raw Score					Percent in each Achievement Level					
Grade	NM1/NM2	NM2/M	M/Ex4	Ex4/Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Not Met 1	Not Met 2	Met	Ex 4	Ex5	Met and Above
3	-0.2440	0.3491	1.2310	1.8378	0-20	21-26	27-33	34-37	38-45	28.8	21.4	25.5	13.6	10.7	49.8
4	-0.4402	0.1776	1.1140	1.6291	0-20	21-27	28-36	37-40	41-50	27.4	26.0	26.8	9.4	10.4	46.6
5	-0.1699	0.5573	1.3740	1.6739	0-23	24-31	32-38	39-41	42-50	29.9	27.9	25.2	8.7	8.3	42.2
6	-0.1182	0.4347	1.0870	1.4120	0-25	26-32	33-40	41-43	44-55	36.8	23.9	22.9	6.5	9.9	39.3
7	-0.2819	0.4310	1.0850	1.4592	0-25	26-35	36-44	45-48	49-60	34.2	25.8	21.3	8.0	10.7	40.0
8	-0.3583	0.2440	0.8550	1.1805	0-25	26-33	34-41	42-44	45-60	33.3	24.8	23.8	7.3	10.8	41.9

2. Introduction

2.1 Background

South Carolina Department of Education (SCDE) replaced the Palmetto Achievement Challenge Tests (PACT) of English language arts (ELA), mathematics, science, and social studies in use since 1999 (ELA and mathematics) and 2003 (science and social studies) in spring 2009 with the Palmetto Assessment of State Standards (PASS). PACT achievement levels were set, using the bookmark procedure, on the mathematics and English language arts PACT in 1999 and the science and social studies PACT in 2003. In setting academic achievement cutscores on PACT, the Department used the Bookmark procedure to set four ELA and mathematics performance levels at two grades (3 and 8) and then used interpolation to set cutscores for the grades between. The Department also used the Bookmark procedure for PACT science and social studies, but set standards at each grade level.

The state wished to conduct standard-setting procedures to inform the determination by the South Carolina Education Oversight Committee (Oversight Committee) of student academic achievement levels on the five PASS assessments administered to each of grades three through eight (total of 30 tests). Data Recognition Corporation (DRC) was chosen to complete the standard setting.

Requirements for the South Carolina testing programs are specified in Act 282 of 2008, the Education Accountability Act as amended in 2008. Palmetto Assessments of State Standards (PASS**)** English language arts (ELA) writing, ELA reading and research, and mathematics tests were administered to all students in grades 3 through 8. PASS science and social studies were administered on a census basis in grades 4 and 7, and to random samples of students in grades 3, 5, 6, and 8, (half of the students at each grade level take science and the other half take social studies). PASS tests were administered for the first time in Spring 2009.

The Oversight Committee reviewed the PASS tests for approval of their use in the state accountability system and was charged with setting student academic achievement level standards on the PASS tests. Subsequent to setting the PASS student performance standards, the Oversight Committee will use the 2009 PASS results to set criteria for the annual school and district report card ratings.

The Oversight Committee is an independent, nonpartisan group made up of 18 educators, business people, and elected officials appointed by the legislature and governor to enact the Education Accountability Act of 1998, as amended by Act 282 of 2008. The administration of the PASS standards based tests involves the South Carolina Department of Education, eighty-six (86) school districts, and several special districts and schools. The program is administered through the Office of Assessment and the South Carolina Department of Education.

For PASS in each grade, two cut points were established to denote three student achievement levels (Not Met, Met, and Exemplary). To satisfy federal reporting standards, proficiency included students performing at the Met or Exemplary levels. One additional cut point differentiating lower from higher performance in the Not Met range of performance, and an additional cut point differentiating higher and lower levels of performance within the Exemplary performance range were established for use in the state school and district accountability system and for informing instruction, denoting a total of five achievement levels (Not Met 1; Not Met 2; Met; Exemplary 4; Exemplary 5).

2.2 Purpose and Objectives

A major factor in selecting the Bookmark method for the PASS was to use the same method that was utilized for the PACT. PASS tests in ELA reading and research, mathematics, science, and social studies consist of multiple-choice items only. The PASS ELA writing includes both extended response and multiple-choice items.

PASS tests will assess the State-adopted academic standards for the following purposes:

To promote student learning and to measure student performance on state standards and,

1. identify areas in which students, schools, or school districts need additional support;
2. indicate the academic achievement for schools, districts, and the State;
3. satisfy federal reporting requirements; and
4. provide professional development to educators.

The results from the PASS tests will be used for evaluating Adequate Yearly Progress for No Child Left Behind and for reporting annual State school and district ratings of end-of-year absolute performance and of growth from year to year.

The panelists were informed that the results from this meeting would be presented to the Education Oversight Committee for review and possible adoption.

3. Preparation for the Bookmark Meeting

In February 2009, a standard setting plan was proposed by DRC. The Plan was reviewed and approved by the Oversight Committee. The plan described the purpose of the meeting, the standard setting dates, specifications of panelists, methodology, and potential consequences related to accountability. This section provides an overview of relevant sections from the plan.

3.1 Panelist Recruitment

The Oversight Committee recruited panelist recommendations from all districts, via superintendents or associate superintendents. Sixty-two Districts responded. Approximately 800 teachers were nominated. In accordance with federal guidelines for representative committees, 150 teachers were chosen using the following background factors in the recruitment decision:

- Gender
- Ethnicity
- Grade level experience
- Content expertise
- Geographic location
- Specializations
- Experience in developing state academic standards, state assessments, and other related activities

As a result, 145 panelists attended the Bookmarking standard setting meeting. Table 3.1 contains the summarized information about the characteristics of the selected panelists by subject based on their self-reported responses to the Participant Survey. As can be seen from this table, most of the panelists were classroom teachers. A few were non-teacher educators. While there were more females than males, this reflects the larger proportion of female teachers in South Carolina schools.

Table 3.1.1: Self-reported Demographical Composition of Panelists by Grade

Demographic		Subject					
		Mathematics	Science	Reading	Writing	Social Studies	Total
Gender	Male	6	3	3	4	7	23
	Female	24	26	25	25	22	122
Ethnicity	Asian	1	0	1	0	0	2
	White/non-Hispanic	22	22	20	22	21	107
	African American	7	6	7	7	7	34
	Latino/Hispanic	0	1	0	0	1	2
Role	Other	0	5	2	1	1	9
	Teacher	20	13	16	14	19	82
	Educator*	10	11	10	13	9	53
Region	Rural	16	18	19	14	16	83
	Urban	1	6	4	4	4	19
	Suburban*	9	4	4	8	7	32
Experience	0 - 5 years	1	1	3	2	4	11
	6 - 10 years	8	5	0	2	4	19
	11 - 15 years	7	7	7	8	5	34
	16 – 20 years	5	6	6	2	4	23
	21 – 25 years	1	3	1	4	8	17
	26 – 30 years	3	4	6	4	1	18
	31 – 35 years	3	2	3	7	3	18
	36 + years*	2	1	1	0	0	4
Total N		30	29	28	29	29	145

* Some panelists chose not to respond to this question.

3.2 Roles and Responsibilities

A number of people were involved in the PASS Bookmarking standard setting event including staff from Oversight Committee, SCDE and DRC, as well as the selected panelists. Participant responsibilities are briefly summarized below:

Oversight Committee Staff—Started the event and gave an introduction about the PASS program during the training. During the bookmark placement, they circulated between the rooms to answer questions relative to policy.

SCDE staff— During the bookmark placement, they circulated between the rooms to answer questions relative to the assessment and test content.

Panelists—Made personal investment to the process, shared experiences, listened to colleagues, engaged in procedures as directed by the room facilitators including making judgments related to setting student expectations on the PASS.

Overall Psychometric Lead—DRC staff introduced procedures during training and monitored progress and results during the event.

Room Facilitators—DRC staff reviewed procedures, kept panels moving at a pace that would achieve agenda timelines, and explained results.

Content Specialists—DRC staff assisted as needed with the Descriptors of Achievement Levels (DAL) reviews and covered questions relevant to test content.

Data Analyst—Entered panelists' bookmark settings and generated results.

Project Management—Liaison with hotel facility staff; reviewed reimbursement procedures.

3.3 Materials Preparation

Workshop materials were developed and printed by DRC. Following is a list of materials made available to panelists during the workshop:

- Item Map
- Item Separation Map
- Ordered Item Booklet
- Passages
- 2009 Operational Test Forms
- DALs
- Content Standards
- Adhesive bookmarks, pens, highlighters, etc.
- Participant Rating Forms

Training materials, including sample ordered item booklet, item map, item separation map, and rating form were developed and printed by DRC staff. The training materials were developed using items and item data from the NAEP website.

Reading and research, mathematics, science, writing and social studies DALs were originally developed by the SCDE with assistance from educators in the field. The EOC, with assistance from DRC, for the content areas reading and research and mathematics, and educators in the field for the remaining content areas, developed a user friendly format for the DAL's that were used by the panelists at standard setting.

3.4 Data Preparation

Estimating Bookmark Difficulty Locations (BDL). In the Bookmark, the locations of items are rescaled to produce better alignment with the task of asking panelists what a student *should know and be able to do*. Using the equated item parameters (primarily

from the 2009 operational tests), the locations of items were rescaled to a response probability of 0.67 (RP=0.67).

3.5 OIB Preparation

Each Ordered Item Booklet (OIB) contained all items in that grade and content assessment, by order of item difficulty from easiest to most difficult. This was accomplished by using unanchored item difficulties calibrated using data from the Spring 2009 PASS administration. Below is a table displaying the number of items per grade per content area.

Table 3.5.1: Number of Score Points in Ordered Item Booklet

Content	Grade	No. of Score Points in the OIB
Reading and Research	3	36
	4	36
	5	38
	6	40
	7	45
	8	50
Mathematics	3	50
	4	56
	5	56
	6	61
	7	61
	8	63
Science	3	45
	4	45
	5	50
	6	55
	7	55
	8	60
Social Studies	3	45
	4	50
	5	50
	6	55
	7	60
	8	60
Writing	3	55
	4	55
	5	55
	6	55
	7	55
	8	55

4. Standard Setting Procedures

4.1 Training

Training was conducted Sunday evening. A copy of the agenda for the meeting is provided in Appendix B. Participants were told that they were:

- To be responsible for all secure materials
- To verify their individual placements for each round of judgments, and
- To participate in a discussion as a large group

Training materials included:

- DALs
- Ordered Item Booklets (OIB)
- Item Map
- Rating Form

Panelists were told that the process would include iterations (rounds) of individual judgments, large group discussions, and opportunities to revise judgments. In addition, impacts would be presented (percent of students in each performance level) based on the large groups' results.

4.2 Modified Bookmark Procedure

DRC utilized a modified Bookmark procedure, which is largely based on the Bookmark method (Lewis, Mitzel, & Green, 1996), to coincide as closely as possible to the methodology used in the previous standard settings. Bookmark is one in a broad category of methods commonly referred to as item mapping, which focus on items rather than examinees. To begin the process, participants were asked to visualize the knowledge and skills of a student who is at the borderline between two Performance Levels based on the DAL's. Thereafter, participants were given an ordered item booklet (with items ordered from easiest to most difficult) and asked to assess whether this borderline student had a reasonably high probability of answering each item. For MC items, "reasonably high" was defined as .67. In addition, an item map was presented which contained the response key, the content objective, and item sequence in the test booklets. Item separation maps were also presented which showed the relative difficulty of each item. Panelists were given a rating sheet to record their individual placements for all achievement levels by round.

Round 1. The modified Bookmark procedure proceeded in three rounds. Round 1 began following the review of items and/or passages. Participants reviewed the ordered item booklets independently and thus should not have been influenced by other panelists' opinions. During this review, they were asked to determine what

academic knowledge, skills, and competencies are required for Not Met, Met and Exemplary students to respond correctly to each successively more difficult item.

Training by the Overall Psychometric Lead during the Bookmark placement session emphasized the following points:

- The bookmark represents a judgment of the divide between items that a student at the threshold of a performance level (the student minimally qualified to attain a given achievement level) should master from those it is not necessary to master.
- Bookmark placement should not be thought of as separating two items, but rather two groups of items. In other words, a placement should not hinge on distinctions drawn for adjacent items, without some compelling reason, such as a large gap in content difficulty.
- Students with a scaled score at a given cut score will have approximately a .67 probability of correctly responding to an MC item also at the cut score. These same students will have a higher probability of success on easier items (before the bookmark placement) and a lower probability of success on harder items (after the bookmark placement).
- In placing their bookmarks, the task was to consider what students should know and be able to do in the context of the skills implied by the DALs and the item content.
- Panelists were instructed to start with placing the Not Met 2/Met cut, then the Met/Exemplary 4 cut, continuing on to the Not Met 1/Not Met 2 cut.
- Panelists were asked to record their bookmark placements on the rating form. The judgments were entered into a spreadsheet program, and the median cut score was calculated for the full panel.

Round 2. Round 2 started with the discussion of round 1 results. The bookmark page numbers for each panelist, the median page number of full panel, the distribution of cut scores for each achievement level, and the impact data (i.e., the percents of students categorized into each achievement level based on Spring 2009 PASS student performance across the state and Round 1 panelists' recommendations) were presented to the panelists. They were instructed to verify the ratings entered into the program as correct. Then panelists were asked to provide rationales for why they made their Round 1 placements where they did or what skills and knowledge were required. During the Round 2 discussion, there is no attempt by the facilitators to encourage consensus.

After the Round 2 discussion, panelists were asked to make a second set of bookmark placements. The judgments were entered into the spreadsheet program to calculate the median cut score for the full panel and impact data.

Round 3. Round 3 began with the presentation of Round 2 results to the large group. As before, panelists were instructed to check the ratings entered into the

program first, then to provide their reasons for why they made their Round 2 placements where they did or what skills and knowledge were required. Round 3 concludes with a final vote from panelists. The round 3 results were presented to the panelists for their information after the break. However, no discussion was made on the final results.

4.3 Vertical Articulation Across Grades

An important goal of the Bookmark meetings was to achieve vertical articulation across grades within each content area. In this context, *vertical articulation* is defined as having some degree of continuity across all grades in terms of the percent of students categorized into each of the achievement levels. To achieve this articulation, two processes were utilized, one within the meeting and another post-hoc (applied to the final results). Within the meeting, this was accomplished by displaying the Round 3 results, in terms of the percent of students in each category, from an adjacent grade translated into bookmarks within the OIB. For example, at the beginning of Round 1 for grade 4, grade 5 results from Round 3 were given to the panelists. Panelists were instructed not to mimic the results from the adjacent grade, but to use it as a guide. They were then instructed that they could place their grade 4 bookmarks at, below, or above the reference bookmarks from grade 5. It is important to note that no reference bookmarks were displayed for the initial grade (grade 6).

The second process to ensure articulation across grades was an application of post-smoothing. This involved applying an analytical smoothing function across grades for each cutscore. The post-smoothed results overall did not result in the cutscores being either more or less difficult than the panelists' recommendation. Rather, it moved some cutscores higher for individual grades and others lower. The post-smoothing was first applied to the percents of students placed in each achievement level at the end of Round 3. For example, in reading and research for the Exemplary 5 level, the Panelists' Recommendations resulted in 20.7 (% of students placed into Exemplary 5), 30.1, 23.0, 15.6, 25.2, and 12.5 for grades 3 through 8, respectively. After post-smoothing, the values were 20.7, 18.5, 17.1, 15.6, 15.0, and 12.5, arguably a better articulation across grades. Figures 4.3.1 to 4.3.10, below, show the before and after of this application for each subject. It is important to note that no post-smoothing was allowed to extend beyond one standard error of the test for any individual grade; and, the sum of the adjustments across grades were limited to within one tenth of a standard error. After the percents in level were smoothed, an interpolation was performed on the logit cutscores.

After the standard settings for all grades and content areas were completed, a group of panelists met together. Results across all grades were shared including the final recommended cut scores for each grade level as well as the impact data based on those cuts scores. Panelists were asked to react to and discuss these results, but were not allowed to suggest additional adjustments beyond Round 3 results. However, their comments were used to inform the post-smoothing process.

Figure 4.3.1

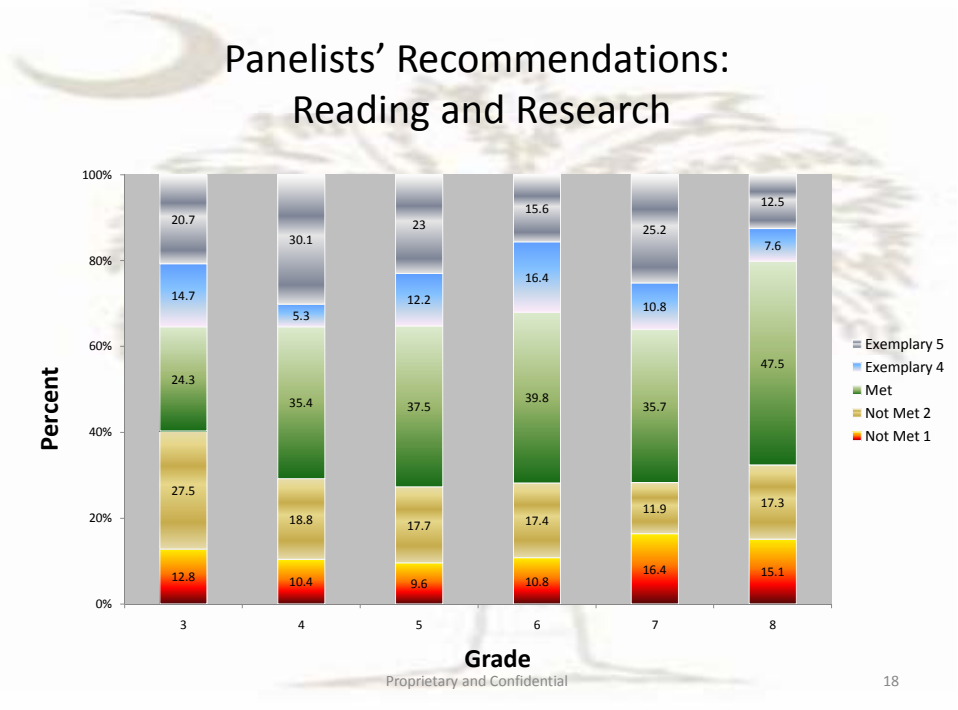


Figure 4.3.2

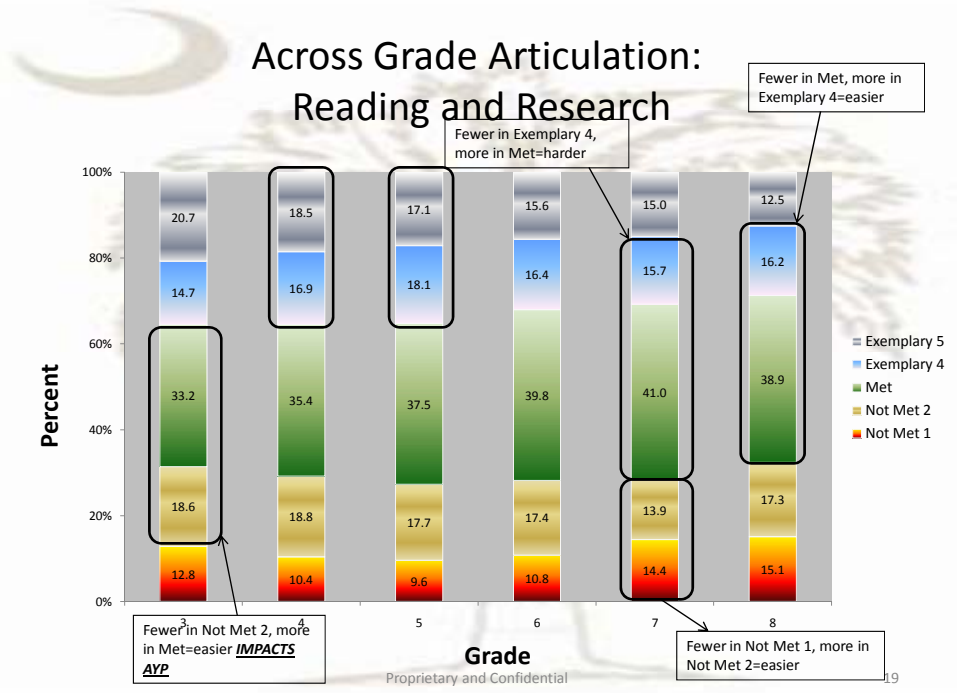


Figure 4.3.3

Panelists' Recommendations: Writing

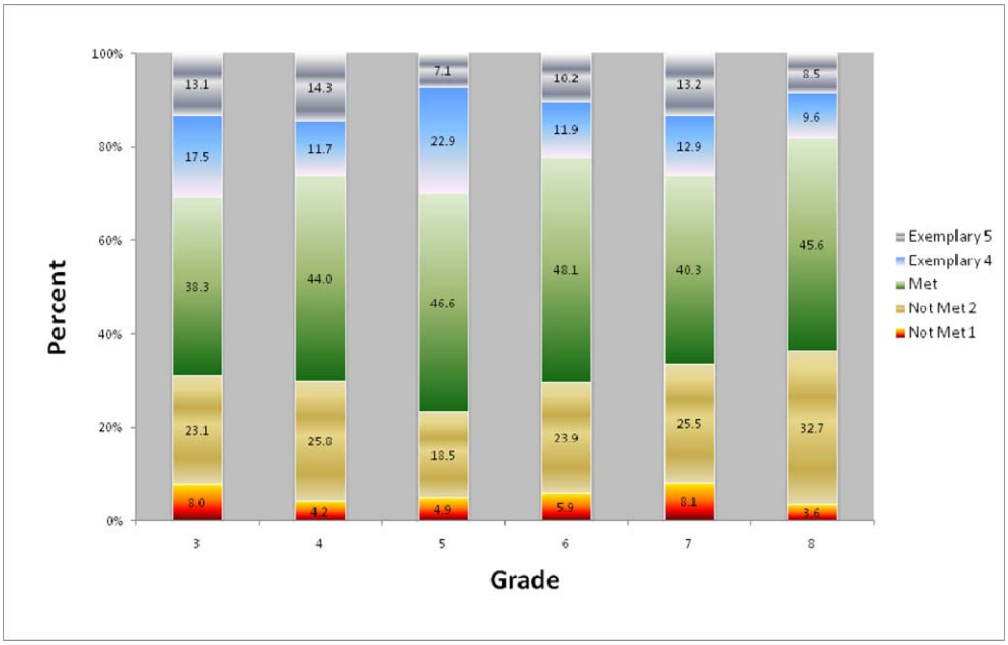


Figure 4.3.4

Across Grade Articulation: Writing

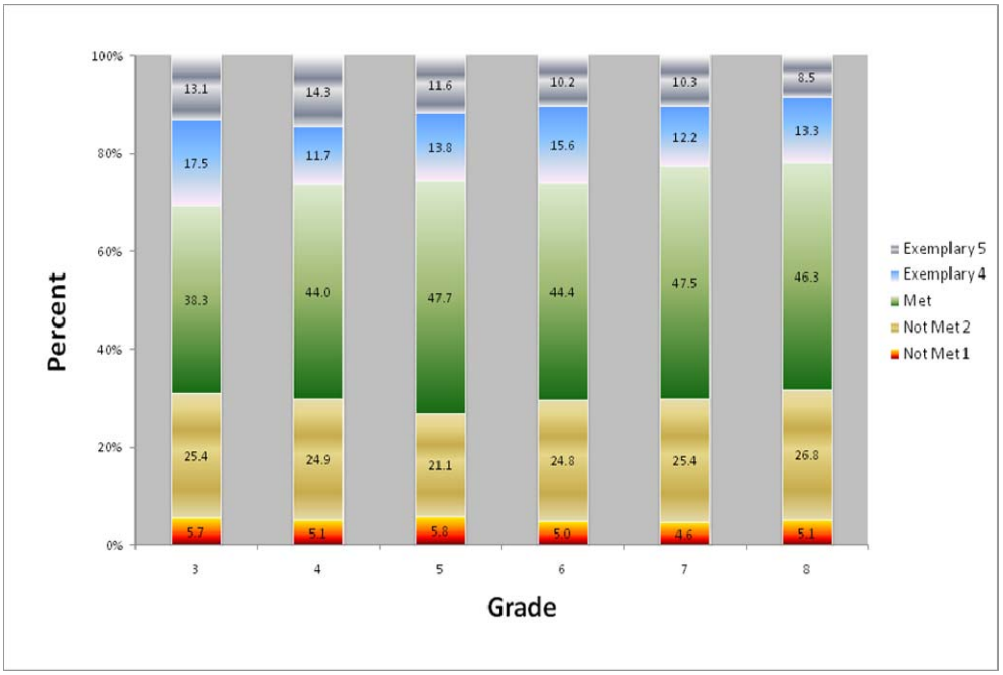


Figure 4.3.5

Panelists' Recommendations: Mathematics

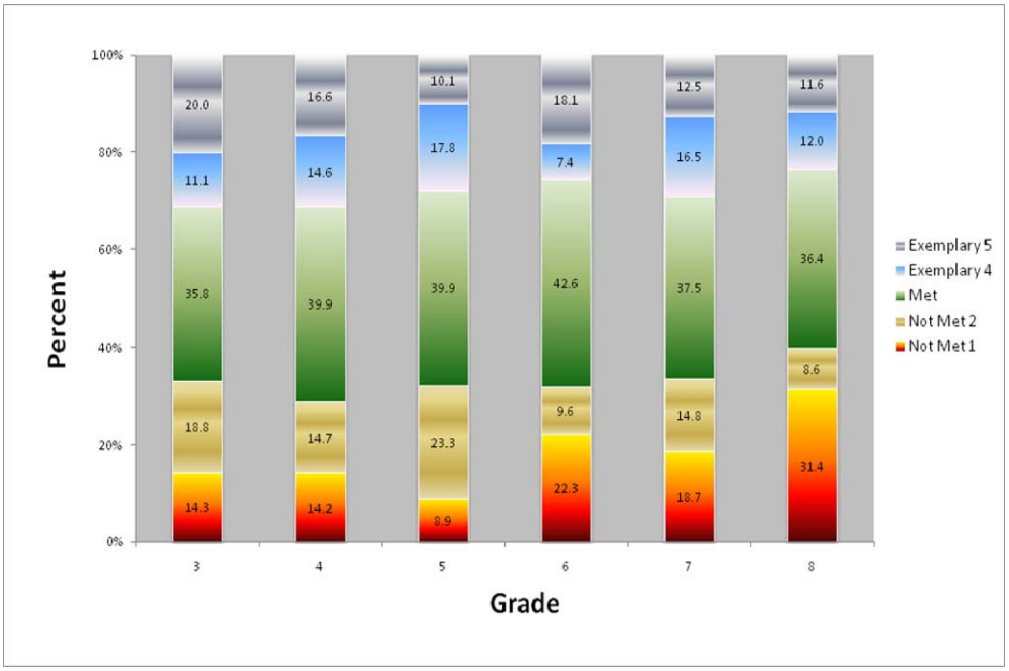


Figure 4.3.6

Across Grade Articulation: Mathematics

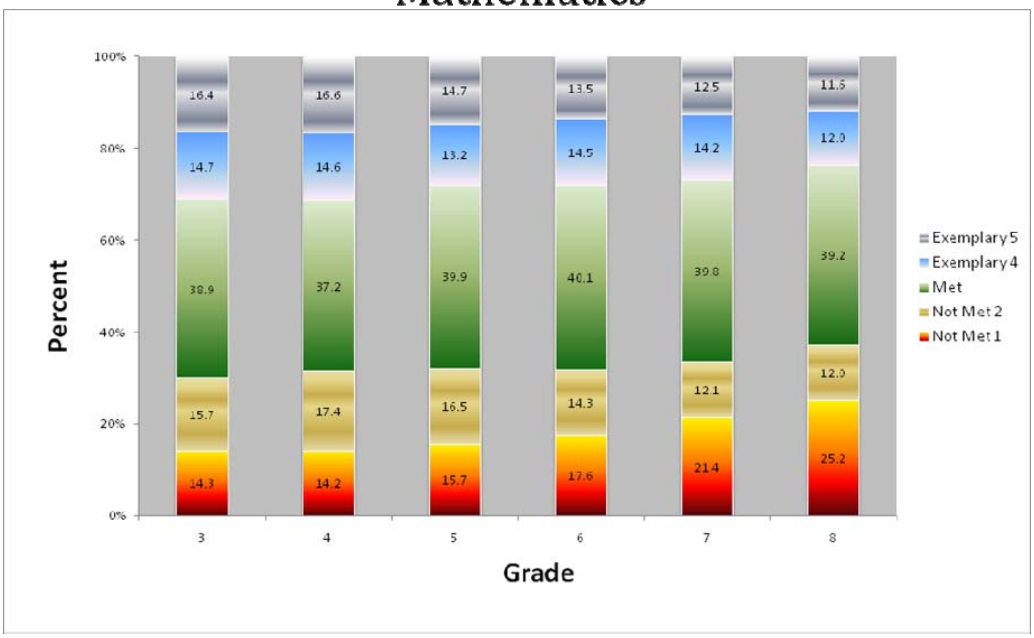


Figure 4.3.7

Panelists' Recommendations: Science

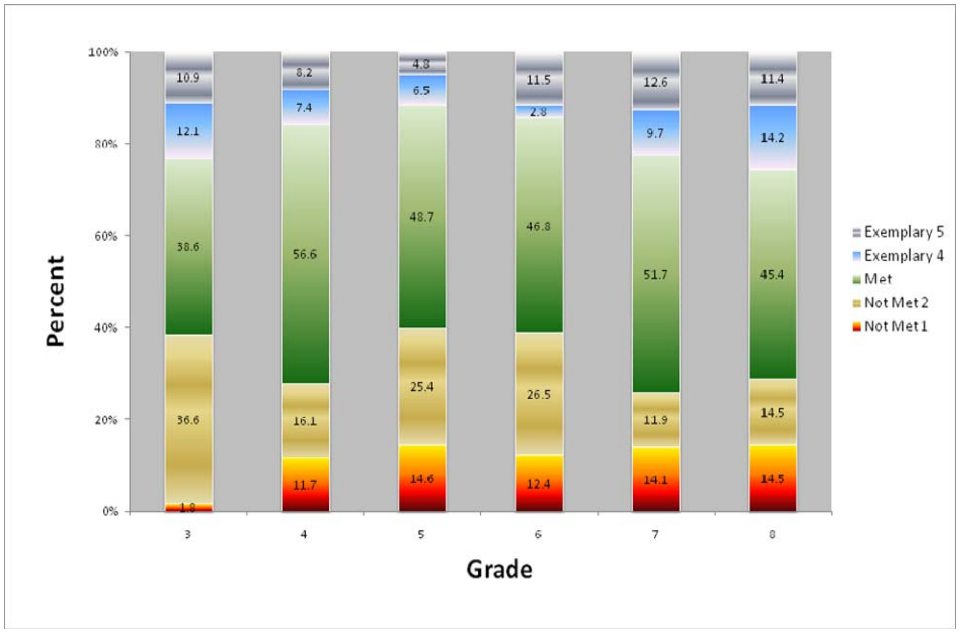


Figure 4.3.8

Across Grade Articulation: Science

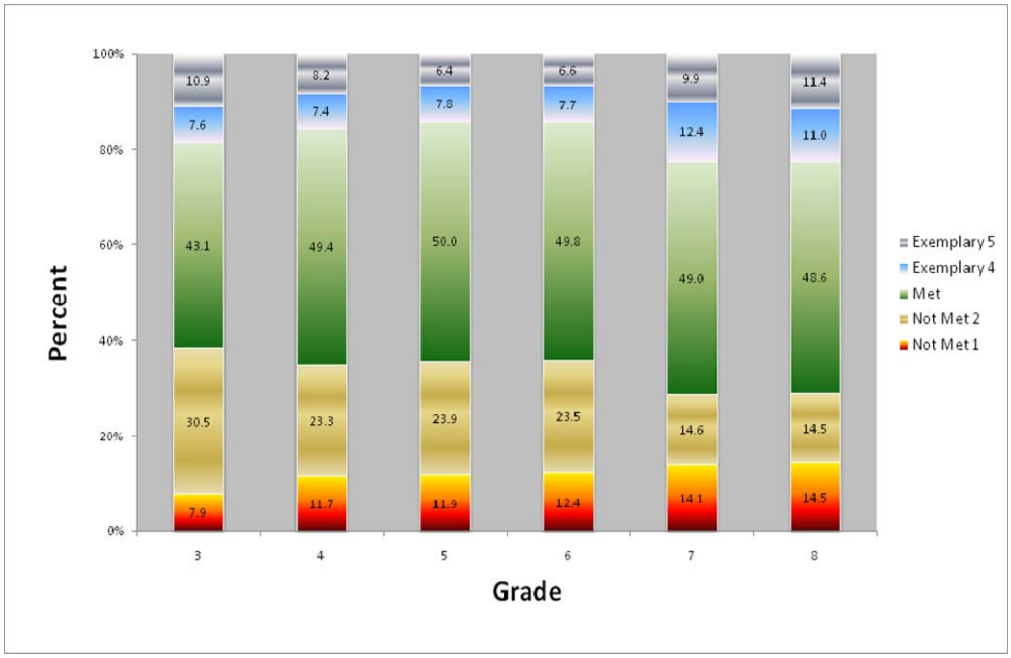


Figure 4.3.9

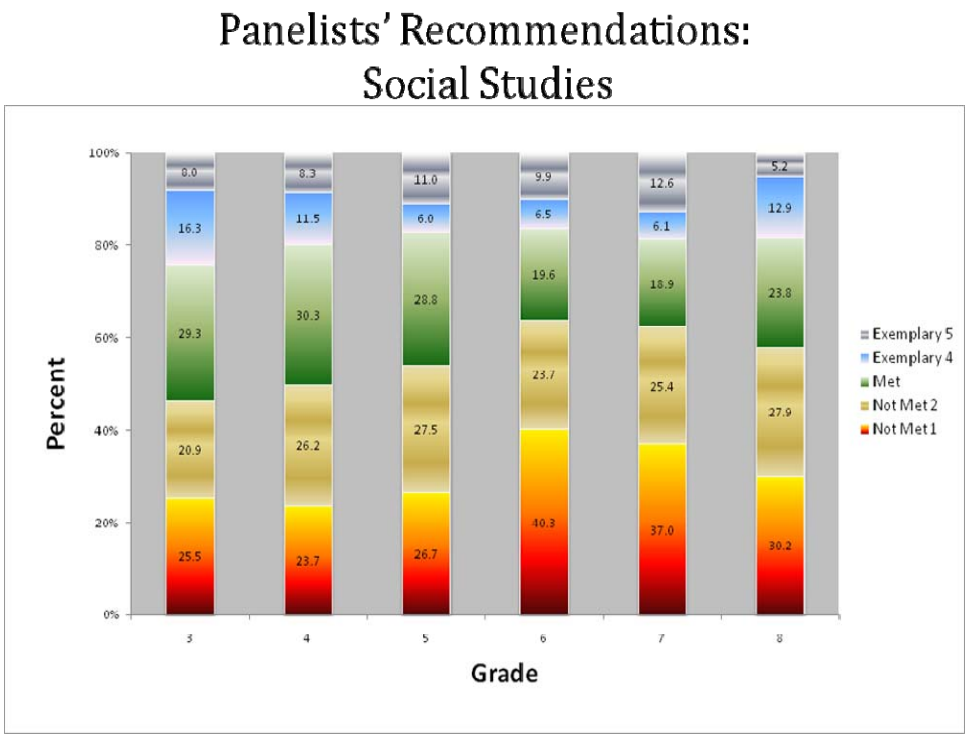
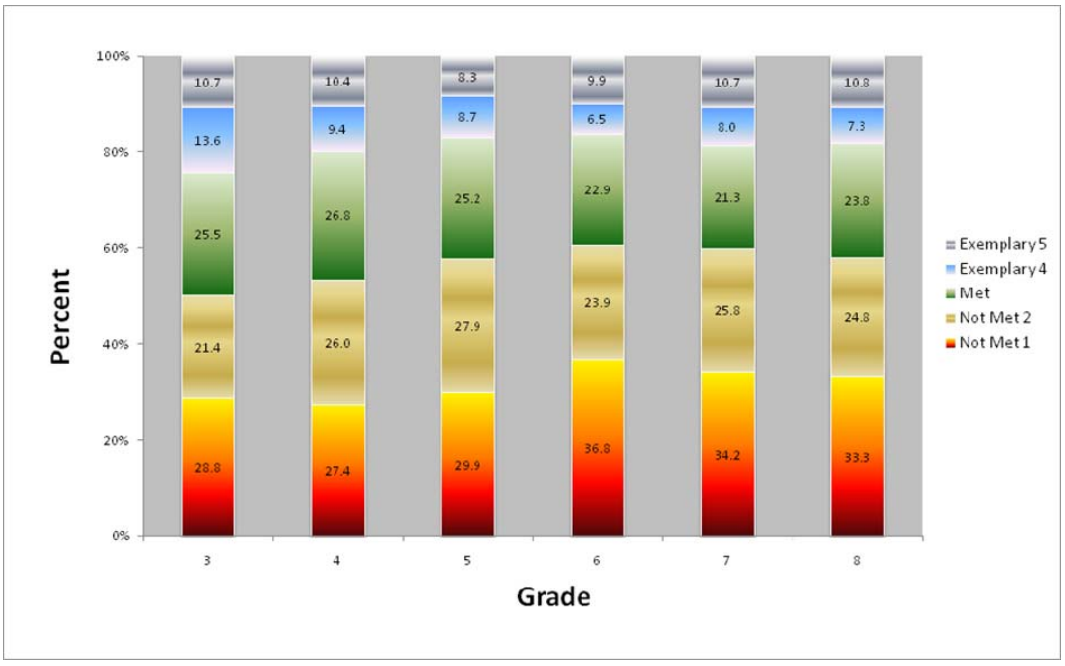


Figure 4.3.10



5. Results

5.1 Comparative Data

Subsequent to the Bookmark meeting, DRC was asked to provide the EOC with PACT reference points alongside the panelists' recommendations for the PASS Met cutscore. The stated two reference points of interest were for PACT Basic and PACT Proficient. These reference points were calculated using the PACT cutscores translated to the PASS Spring 2009 data using a statistical process referred to as linking that makes two scales comparable (within some degree of statistical error). No table is shown for writing given that there was no PACT writing score. Figure 5.1.1 to 5.1.4 display these values, along with "call-outs" to assist in interpretation.

Figure 5.1.1

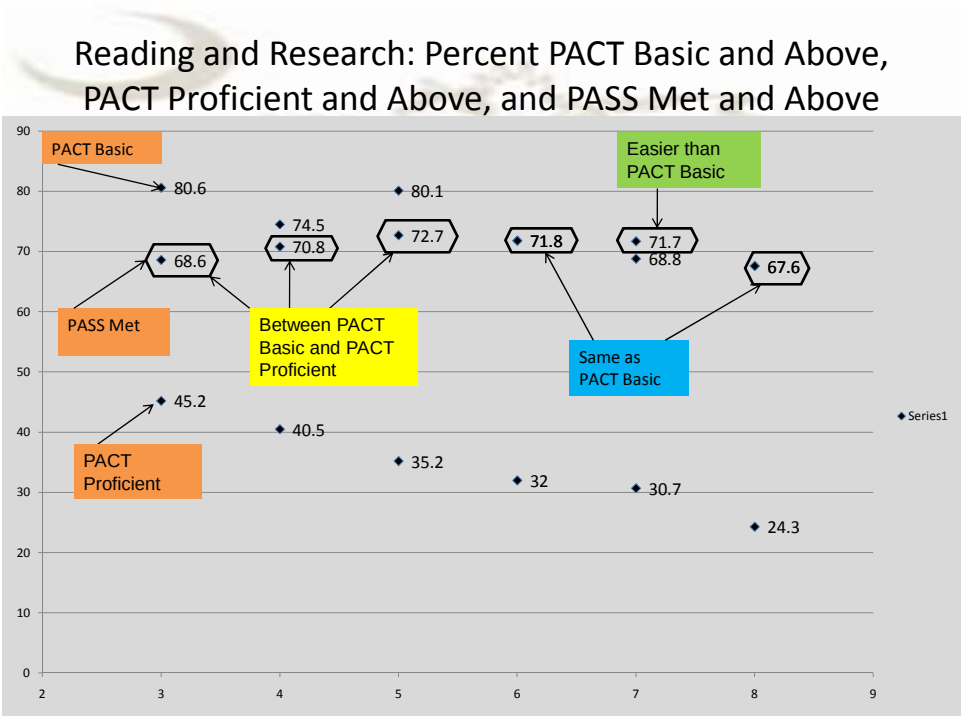


Figure 5.1.2

Mathematics: Percent PACT Basic and Above, PACT Proficient and Above, and PASS Met and Above

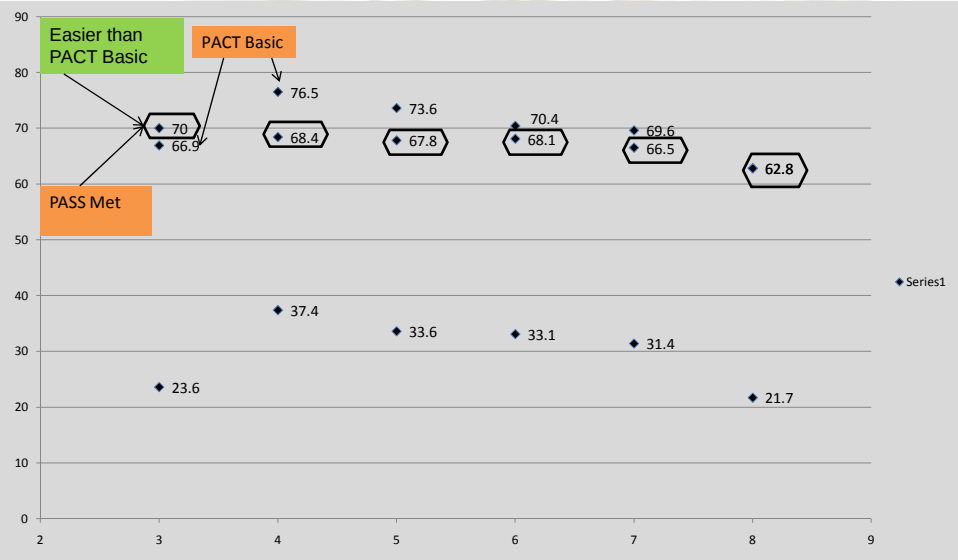


Figure 5.1.3

Science: Percent PACT Basic and Above, PACT Proficient and Above, and PASS Met and Above

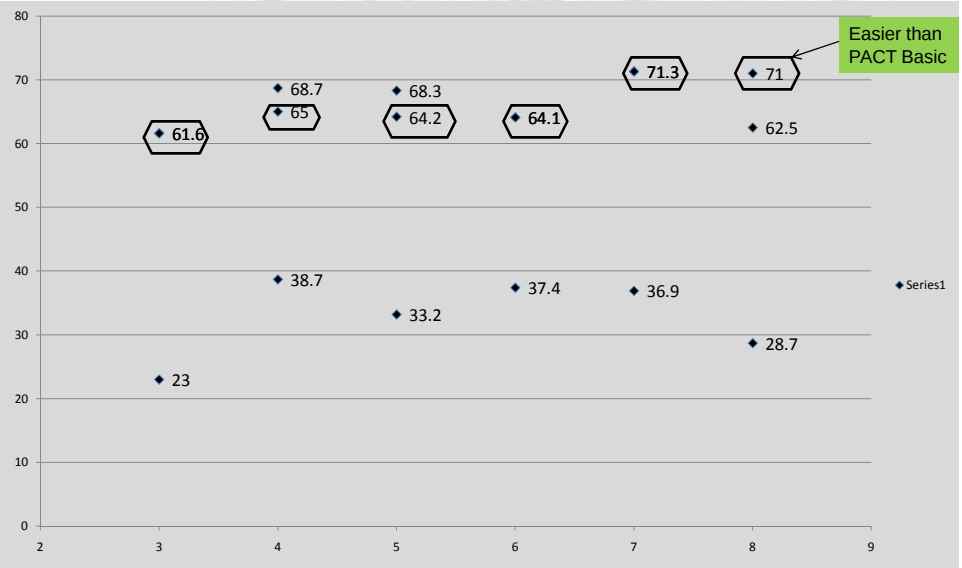
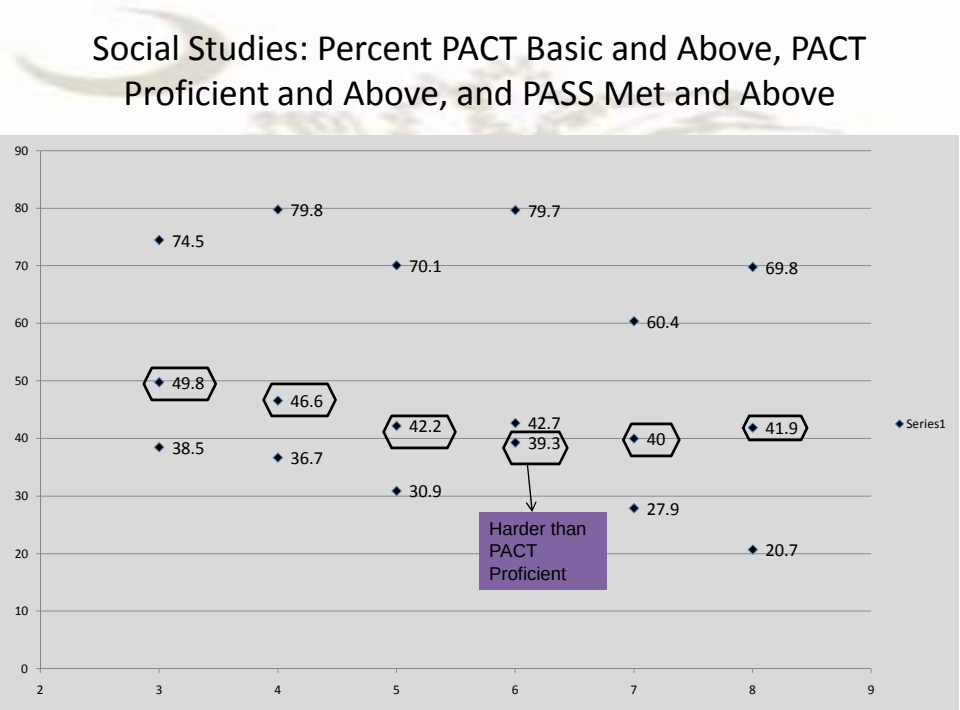


Figure 5.1.4



5.2 Cutscores and Standard Errors

Each bookmark page number is associated with a bookmark difficulty, which can be used to find the raw score or scale score cut through a raw score to logit look-up table. The scale score cut and its conditional standard error of measurement (SEM) was used to establish the 1 SEM confidence intervals (CI) around the recommended cutscore. The SEM describes the expected variation between the examinee's true score and their observed score. By bracketing the scale score cut score by plus or minus one SEM, we identify the 68% confidence interval, which can be used to estimate the effects of false positives (passing students who may not actually have sufficient knowledge and skills) or false negatives (failing students who do have sufficient knowledge and skills). The EOC used these standard errors to identify the appropriate cut score taking into consideration variance in the human judgments and imprecision in the test itself.

The raw score cuts (recommended raw score cuts plus or minus one or more standard error of measurement) and the percents of students falling into each performance level were presented in Section 1 in the executive summary.

The final median logit cuts, the standard error of the median, and percent of students scoring at or below each logit cut point can be found in Appendix C and D.

5.3 Panelists' Survey Evaluation Results

On the last day of the standard setting, panelists were asked to complete an evaluation on the standard setting meeting itself. This information was used to aid in measuring the panelists' confidence in their work.

Evaluation Form

The purpose of this Evaluation Form is to obtain your opinions about the standards setting meeting. Your opinions will provide a basis for evaluating the training and the standard setting process. Please do not put your name on this form. We want your opinions to remain anonymous.

Content Area: Reading

1. Standard Setting Committee Group
   Reading N=28

2. Check the column that most accurately reflects your opinion regarding the usefulness of the following materials:

Materials	Not Useful		Partially Useful		Useful		Very Useful	
	N	Percent	N	Percent	N	Percent	N	Percent
Descriptor of Achievement Levels	0	0	3	11	9	33	15	56
Test Booklet	0	0	0	0	3	11	24	89
Ordered Item Booklet	0	0	0	0	3	11	24	89
Item Separation Chart	0	0	0	0	5	19	22	81
Item Map	0	0	1	4	8	30	18	67
Statistical Impact Data	1	4	0	0	3	11	23	85

3. Check the column that most accurately reflects your opinion regarding the amount of time allotted for your ratings:

Time Allotted	Too Little Time		Almost Right		Too Much Time	
	N	Percent	N	Percent	N	Percent
Round 1	0	0	24	89	3	11
Round 2	0	0	26	96	1	4
Round 3	0	0	25	93	2	7

4. Check the column that most accurately reflects your satisfaction with the following roles:

Role	Not Satisfied		Partially Satisfied		Satisfied		Very Satisfied	
	N	Percent	N	Percent	N	Percent	N	Percent
DRC Psychometric Lead	0	0	0	0	6	22	21	78
DRC Room Facilitator	0	0	0	0	5	19	22	81
DRC Content Specialists	0	0	0	0	9	33	18	67
Other DRC Staff	0	0	0	0	10	38	16	62

5. Check the column that most accurately reflects the level of confidence you had in determining the bookmark location for each assessment cutscore. Please only indicate confidence level for the grades in which you participated. Otherwise, leave it blank.

Grade	Cut-Point Location	Not Confident		Partially Confident		Confident		Very Confident	
		N	Percent	N	Percent	N	Percent	N	Percent
3	Not Met2/Not Met 1	1	7	6	40	6	40	2	13
	Met/Not Met 2	2	13	7	47	5	33	1	7
	Exemplary 4/Met	2	13	5	33	5	33	3	20
4	Not Met2/Not Met 1	0	0	2	13	6	40	7	47
	Met/Not Met 2	0	0	1	7	6	40	8	53
	Exemplary 4/Met	2	13	1	7	4	27	8	53
5	Not Met2/Not Met 1	0	0	2	8	14	54	10	38
	Met/Not Met 2	0	0	2	8	12	46	12	46
	Exemplary 4/Met	2	8	3	12	9	35	12	46
6	Not Met2/Not Met 1	2	7	2	7	16	59	7	26
	Met/Not Met 2	2	7	0	0	16	59	9	33
	Exemplary 4/Met	4	15	2	7	12	44	9	33
7	Not Met2/Not Met 1	0	0	1	8	6	50	5	42
	Met/Not Met 2	0	0	1	8	5	42	6	50
	Exemplary 4/Met	0	0	2	17	5	42	5	42
8	Not Met2/Not Met 1	0	0	0	0	8	67	4	33
	Met/Not Met 2	0	0	0	0	6	50	6	50
	Exemplary 4/Met	0	0	0	0	6	50	6	50

6. How confident are you that the processes and methods used will produce valid results?

Processes and Methods Produce Valid Results		
Confidence	N	Percent
Not Confident	0	0
Partially Confident	4	15
Confident	6	22
Very Confident	17	63

Content Area: Mathematics

1. Standard Setting Committee Group
   Mathematics N=29

2. Check the column that most accurately reflects your opinion regarding the usefulness of the following materials:

Materials	Not Useful		Partially Useful		Useful		Very Useful	
	N	Percent	N	Percent	N	Percent	N	Percent
Descriptor of Achievement Levels	1	3	9	31	14	48	5	17
Test Booklet	0	0	0	0	5	17	24	83
Ordered Item Booklet	0	0	0	0	1	3	28	97
Item Separation Chart	0	0	1	3	5	17	23	79
Item Map	0	0	0	0	9	31	20	69
Statistical Impact Data	0	0	0	0	9	32	19	68

3. Check the column that most accurately reflects your opinion regarding the amount of time allotted for your ratings:

Time Allotted	Too Little Time		Almost Right		Too Much Time	
	N	Percent	N	Percent	N	Percent
Round 1	0	0	29	100	0	0
Round 2	0	0	29	100	0	0
Round 3	0	0	29	100	0	0

4. Check the column that most accurately reflects your satisfaction with the following roles:

Role	Not Satisfied		Partially Satisfied		Satisfied		Very Satisfied	
	N	Percent	N	Percent	N	Percent	N	Percent
DRC Psychometric Lead	0	0	0	0	13	45	16	55
DRC Room Facilitator	0	0	1	3	8	28	20	69
DRC Content Specialists	0	0	0	0	11	38	18	62
Other DRC Staff	0	0	0	0	11	38	18	62

5. Check the column that most accurately reflects the level of confidence you had in determining the bookmark location for each assessment cutscore. Please only indicate confidence level for the grades in which you participated. Otherwise, leave it blank.

Grade	Cut-Point Location	Not Confident		Partially Confident		Confident		Very Confident	
		N	Percent	N	Percent	N	Percent	N	Percent
3	Not Met2/Not Met 1	0	0	0	0	8	57	6	43
	Met/Not Met 2	0	0	1	7	7	50	6	43
	Exemplary 4/Met	0	0	0	0	8	57	6	43
4	Not Met2/Not Met 1	0	0	0	0	10	63	6	38
	Met/Not Met 2	0	0	0	0	10	63	6	38
	Exemplary 4/Met	0	0	0	0	10	63	6	38
5	Not Met2/Not Met 1	3	10	2	7	15	52	9	31
	Met/Not Met 2	0	0	0	0	19	66	10	34
	Exemplary 4/Met	0	0	1	3	18	62	10	34
6	Not Met2/Not Met 1	1	3	7	24	19	66	2	7
	Met/Not Met 2	0	0	6	21	17	59	6	21
	Exemplary 4/Met	0	0	5	17	19	66	5	17
7	Not Met2/Not Met 1	0	0	2	15	9	69	2	15
	Met/Not Met 2	0	0	1	8	9	69	3	23
	Exemplary 4/Met	0	0	2	15	8	62	3	23
8	Not Met2/Not Met 1	2	15	3	23	8	62	0	0
	Met/Not Met 2	0	0	4	31	6	46	3	23
	Exemplary 4/Met	0	0	3	23	8	62	2	15

6. How confident are you that the processes and methods used will produce valid results?

Processes and Methods Produce Valid Results		
Confidence	N	Percent
Not Confident	0	0
Partially Confident	4	14
Confident	20	71
Very Confident	4	14

Content Area: Writing

1. Standard Setting Committee Group
   Writing N=26

2. Check the column that most accurately reflects your opinion regarding the usefulness of the following materials:

Materials	Not Useful		Partially Useful		Useful		Very Useful	
	N	Percent	N	Percent	N	Percent	N	Percent
Descriptor of Achievement Levels	0	0	1	4	11	42	14	54
Test Booklet	0	0	1	4	2	8	22	88
Ordered Item Booklet	0	0	0	0	2	8	24	92
Item Separation Chart	0	0	3	12	7	27	16	62
Item Map	0	0	1	4	7	28	17	68
Statistical Impact Data	0	0	0	0	5	19	21	81

3. Check the column that most accurately reflects your opinion regarding the amount of time allotted for your ratings:

Time Allotted	Too Little Time		Almost Right		Too Much Time	
	N	Percent	N	Percent	N	Percent
Round 1	0	0	24	92	2	8
Round 2	0	0	21	81	5	19
Round 3	0	0	20	77	6	23

4. Check the column that most accurately reflects your satisfaction with the following roles:

Role	Not Satisfied		Partially Satisfied		Satisfied		Very Satisfied	
	N	Percent	N	Percent	N	Percent	N	Percent
DRC Psychometric Lead	0	0	0	0	4	15	22	85
DRC Room Facilitator	0	0	0	0	10	38	16	62
DRC Content Specialists	0	0	3	12	8	31	15	58
Other DRC Staff	0	0	0	0	7	29	17	71

5. Check the column that most accurately reflects the level of confidence you had in determining the bookmark location for each assessment cutscore. Please only indicate confidence level for the grades in which you participated. Otherwise, leave it blank.

Grade	Cut-Point Location	Not Confident		Partially Confident		Confident		Very Confident	
		N	Percent	N	Percent	N	Percent	N	Percent
3	Not Met2/Not Met 1	0	0	0	0	5	38	8	62
	Met/Not Met 2	0	0	0	0	6	46	7	54
	Exemplary 4/Met	1	8	0	0	4	31	8	62
4	Not Met2/Not Met 1	0	0	0	0	7	54	6	46
	Met/Not Met 2	0	0	1	8	6	46	6	46
	Exemplary 4/Met	0	0	1	8	7	54	5	38
5	Not Met2/Not Met 1	0	0	1	4	12	48	12	48
	Met/Not Met 2	0	0	1	4	14	56	10	40
	Exemplary 4/Met	0	0	2	8	12	50	10	42
6	Not Met2/Not Met 1	0	0	1	4	11	46	12	50
	Met/Not Met 2	0	0	1	4	11	46	12	50
	Exemplary 4/Met	0	0	2	8	11	46	11	46
7	Not Met2/Not Met 1	0	0	1	8	3	25	8	67
	Met/Not Met 2	0	0	1	8	3	25	8	67
	Exemplary 4/Met	0	0	1	8	4	33	7	58
8	Not Met2/Not Met 1	0	0	1	8	3	25	8	67
	Met/Not Met 2	0	0	0	0	4	33	8	67
	Exemplary 4/Met	0	0	1	8	4	33	7	58

6. How confident are you that the processes and methods used will produce valid results?

Processes and Methods Produce Valid Results		
Confidence	N	Percent
Not Confident	0	0
Partially Confident	0	0
Confident	12	50
Very Confident	12	50

Content Area: Science

1. Standard Setting Committee Group
   Science N=28

2. Check the column that most accurately reflects your opinion regarding the usefulness of the following materials:

Materials	Not Useful		Partially Useful		Useful		Very Useful	
	N	Percent	N	Percent	N	Percent	N	Percent
Descriptor of Achievement Levels	0	0	1	4	12	44	14	52
Test Booklet	0	0	0	0	6	22	21	78
Ordered Item Booklet	0	0	0	0	2	7	25	93
Item Separation Chart	0	0	0	0	11	41	16	59
Item Map	1	4	2	7	11	41	13	48
Statistical Impact Data	0	0	0	0	5	19	22	81

3. Check the column that most accurately reflects your opinion regarding the amount of time allotted for your ratings:

Time Allotted	Too Little Time		Almost Right		Too Much Time	
	N	Percent	N	Percent	N	Percent
Round 1	0	0	28	100	0	0
Round 2	0	0	28	100	0	0
Round 3	0	0	27	96	1	4

4. Check the column that most accurately reflects your satisfaction with the following roles:

Role	Not Satisfied		Partially Satisfied		Satisfied		Very Satisfied	
	N	Percent	N	Percent	N	Percent	N	Percent
DRC Psychometric Lead	0	0	0	0	6	21	22	79
DRC Room Facilitator	0	0	0	0	3	11	25	89
DRC Content Specialists	0	0	0	0	2	7	26	93
Other DRC Staff	0	0	0	0	3	11	25	89

5. Check the column that most accurately reflects the level of confidence you had in determining the bookmark location for each assessment cutscore. Please only indicate confidence level for the grades in which you participated. Otherwise, leave it blank.

Grade	Cut-Point Location	Not Confident		Partially Confident		Confident		Very Confident	
		N	Percent	N	Percent	N	Percent	N	Percent
3	Not Met2/Not Met 1	0	0	1	7	5	33	9	60
	Met/Not Met 2	0	0	3	20	4	27	8	53
	Exemplary 4/Met	0	0	1	7	5	33	9	60
4	Not Met2/Not Met 1	0	0	0	0	4	25	12	75
	Met/Not Met 2	1	6	0	0	3	19	12	75
	Exemplary 4/Met	0	0	0	0	3	19	13	81
5	Not Met2/Not Met 1	0	0	4	15	12	44	11	41
	Met/Not Met 2	0	0	6	22	12	44	9	33
	Exemplary 4/Met	0	0	3	11	13	48	11	41
6	Not Met2/Not Met 1	1	4	7	25	11	39	9	32
	Met/Not Met 2	2	7	8	29	10	36	8	29
	Exemplary 4/Met	1	4	5	18	13	46	9	32
7	Not Met2/Not Met 1	0	0	1	8	4	33	7	58
	Met/Not Met 2	0	0	2	17	4	33	6	50
	Exemplary 4/Met	0	0	1	8	5	42	6	50
8	Not Met2/Not Met 1	0	0	1	11	2	22	6	67
	Met/Not Met 2	0	0	1	11	2	22	6	67
	Exemplary 4/Met	0	0	1	11	3	33	5	56

6. How confident are you that the processes and methods used will produce valid results?

Processes and Methods Produce Valid Results		
Confidence	N	Percent
Not Confident	0	0
Partially Confident	1	4
Confident	14	50
Very Confident	13	46

Content Area: Social Studies

1. Standard Setting Committee Group
   Social Studies N=29

2. Check the column that most accurately reflects your opinion regarding the usefulness of the following materials:

Materials	Not Useful		Partially Useful		Useful		Very Useful	
	N	Percent	N	Percent	N	Percent	N	Percent
Descriptor of Achievement Levels	2	7	15	52	8	28	4	14
Test Booklet	0	0	0	0	9	31	20	69
Ordered Item Booklet	0	0	0	0	1	4	26	96
Item Separation Chart	1	3	6	21	9	31	13	45
Item Map	0	0	6	21	11	38	12	41
Statistical Impact Data	2	7	3	10	8	28	16	55

3. Check the column that most accurately reflects your opinion regarding the amount of time allotted for your ratings:

Time Allotted	Too Little Time		Almost Right		Too Much Time	
	N	Percent	N	Percent	N	Percent
Round 1	0	0	29	100	0	0
Round 2	0	0	27	96	1	4
Round 3	0	0	27	93	2	7

4. Check the column that most accurately reflects your satisfaction with the following roles:

Role	Not Satisfied		Partially Satisfied		Satisfied		Very Satisfied	
	N	Percent	N	Percent	N	Percent	N	Percent
DRC Psychometric Lead	0	0	1	3	6	21	22	76
DRC Room Facilitator	0	0	1	3	7	24	21	72
DRC Content Specialists	1	3	1	3	11	38	16	55
Other DRC Staff	0	0	0	0	11	39	17	61

5. Check the column that most accurately reflects the level of confidence you had in determining the bookmark location for each assessment cutscore. Please only indicate confidence level for the grades in which you participated. Otherwise, leave it blank.

Grade	Cut-Point Location	Not Confident		Partially Confident		Confident		Very Confident	
		N	Percent	N	Percent	N	Percent	N	Percent
3	Not Met2/Not Met 1	0	0	0	0	6	50	6	50
	Met/Not Met 2	0	0	1	9	5	45	5	45
	Exemplary 4/Met	1	9	0	0	5	45	5	45
4	Not Met2/Not Met 1	0	0	1	10	6	60	3	30
	Met/Not Met 2	0	0	1	9	6	55	4	36
	Exemplary 4/Met	0	0	0	0	4	40	6	60
5	Not Met2/Not Met 1	0	0	10	38	11	42	5	19
	Met/Not Met 2	1	4	12	48	8	32	4	16
	Exemplary 4/Met	2	8	7	27	11	42	6	23
6	Not Met2/Not Met 1	12	43	9	32	6	21	1	4
	Met/Not Met 2	14	52	9	33	3	11	1	4
	Exemplary 4/Met	9	32	10	36	6	21	3	11
7	Not Met2/Not Met 1	2	13	5	31	8	50	1	6
	Met/Not Met 2	4	25	6	38	5	31	1	6
	Exemplary 4/Met	4	24	5	29	7	41	1	6
8	Not Met2/Not Met 1	1	6	4	25	10	63	1	6
	Met/Not Met 2	3	19	5	31	7	44	1	6
	Exemplary 4/Met	3	18	3	18	9	53	2	12

6. How confident are you that the processes and methods used will produce valid results?

Processes and Methods Produce Valid Results		
Confidence	N	Percent
Not Confident	3	11
Partially Confident	8	29
Confident	16	57
Very Confident	1	4

6. References

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U.S. Department of Education. Office of Elementary and Secondary Education. (2004, April 28). Standards and Assessments Peer Review Guidance: Information and Examples for Meeting Requirements of the No Child Left Behind Act of 2001.

Appendix A: PASS Descriptors of Achievement Levels

Panelists were given the opportunity to provide edits to the DAL's provided by the EOC. The following DAL's are the edited DAL's used in the standard setting process. For the purposes of standard setting, panelists were instructed to place the cut for the Exemplary 5 Bookmark at the center of the Exemplary 4 description.[2]

Reading and Research

Grade 3

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- analyze complex relationships between main idea and supporting details.
- summarize all aspects of text.
- analyze text to make, revise, and confirm predictions and draw conclusions and inferences based on implicit ideas.
- analyze the effect of first-person point of view.
- analyze complex relationships among characters, setting, and plot.
- analyze complex cause and effect relationships.
- analyze the effect of complex aspects of author's craft (word choice, sentence structure) on the meaning of a text.
- generate the meanings of challenging unfamiliar and multiple meaning words by using context clues.
- use context clues to determine complex relationships among words.
- use print sources and non-print sources to access complex information.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- analyze details that support the expression of the main idea in a literary text.
- summarize evidence that supports the central idea of informational text.
- analyze literary text to make, revise, and confirm predictions and draw conclusions; analyze informational texts to draw conclusions and make inferences.

[2] This applies to all subjects and grades.

- analyze text to determine first-person point of view.
- distinguish among devices of figurative language (including simile, metaphor, personification, hyperbole) and sound devices (onomatopoeia, alliteration).
- analyze the relationship among characters, setting, and plot in literary text.
- analyze the effect of author's craft (for example, word choice and sentence structure) on the meaning of literary text.
- classify works of fiction (including fables, tall tales, and folktales) and works of nonfiction (including biographies) by characteristics.
- recognize characteristics of poetry (including stanza, rhyme, and repetition).
- analyze cause and effect relationships in literary texts; analyze informational texts to identify cause-and-effect relationships.
- distinguish between facts and opinions in informational texts.
- use headings, subheadings, print styles, captions, chapter headings; graphic features (including illustrations, graphs, charts, maps diagrams, graphic organizers) and functional text features (including tables of contents, glossaries, indexes) to gain information.
- generate the meanings of unfamiliar and multiple meaning words by using context clues.
- use base words and affixes to determine meanings of words.
- interpret the meaning of idioms encountered in texts.
- use context clues to determine word relationships (including synonyms, antonyms, and homonyms).
- generate a topic for inquiry.
- use print sources (for example, books, magazines, charts, graphs, diagrams, dictionaries, encyclopedias, atlases, and thesauri) and nonprint sources (for example, pictures, photographs, video, and television) to access information.
- organize information by classifying or sequencing.
- paraphrase research information accurately and meaningfully.
- use the Internet as a source of information.
- use vocabulary (including Standard American English) that is appropriate for the particular audience or purpose. Is this standard truly assessed in Reading? Should it be deleted from DALs?

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- identify main idea and some supporting details.
- partially summarize evidence that supports the central idea of informational text.
- make some inferences, draw some conclusions, and make some predictions.
- identify first-person point of view.
- identify some figurative language (including simile, metaphor, personification, hyperbole) and sound devices (onomatopoeia, alliteration).
- analyze some relationships between characters and plot.

- classify some works of fiction and works of nonfiction by characteristics.
- recognize some characteristics of poetry (including stanza, rhyme, and repetition).
- analyze some cause and effect relationships in texts.
- identify facts in informational text.
- use some headings and subheadings, graphic features (including illustrations, graphs, charts, maps diagrams, graphic organizers), and functional text features (including tables of contents, glossaries, indexes) to gain information.
- generate meanings of some unfamiliar and multiple meaning words by using context clues.
- use context clues to determine some word relationships (synonyms, antonyms, and homonyms).
- identify base words and affixes.
- identify idioms.
- generate some research topics.
- use some print sources (books, magazines, charts, graphs, diagrams, dictionaries, encyclopedias, atlases, and thesauri)and some nonprint sources (pictures, photographs, video, and television) to access information.
- organize some information by.
- paraphrase some research information with some accuracy and meaning.
- use some Internet resources for information.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 4

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- analyze complex relationships between main idea and supporting details.
- analyze texts to draw complex conclusions and make complex inferences.
- distinguish between first-person and third-person points of view in text that includes first-person dialogue with third-person point of view.
- analyze subtle effects of characterization and conflict on plot.
- analyze complex cause and effect relationships.
- analyze the use of facts and opinions.
- interpret complex effects of author's craft (word choice, sentence structure, use of figurative language and dialogue) on the meaning of a text.

- generate the meanings of challenging unfamiliar and multiple meaning words by using context clues.
- use print sources and nonprint sources to access complex information.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- analyze the details that support the expression of the main idea in literary text.
- summarize evidence that supports the central idea of informational text.
- analyze texts to draw conclusions and make inferences.
- distinguish between first-person and third-person points of view.
- distinguish among devices of figurative language (simile, metaphor, personification, hyperbole) and sound devices (onomatopoeia, alliteration).
- analyze the impact of characterization and conflict on plot.
- interpret the effect of author's craft (word choice, sentence structure, use of figurative language and dialogue) on the meaning of literary text.
- classify works of fiction (including fables, tall tales, and folk tales) and nonfiction (including biographies, personal essays) by genre characteristics.
- recognize characteristics of poetry (including stanza, rhyme, and repetition).
- analyze cause and effect relationships in literary texts; analyze informational texts to identify cause and effect relationships.
- analyze informational text to locate and identify facts and opinions.
- use headings, subheadings, print styles, white space, captions, and chapter headings; graphic features (including illustrations, graphs, charts, maps, diagrams, graphic organizers) and functional text features (including tables of contents, glossaries, indexes, appendices) to gain information.
- generate meanings of unfamiliar and multiple meaning words by using context clues (for example, those that provide an example or a definition).
- use base words and affixes to determine meanings of words.
- interpret the meaning of idioms encountered in texts.
- clarify and refine a research topic.
- use print sources (for example, books, magazines, charts, graphs, diagrams, dictionaries, encyclopedias, atlases, thesauri, newspapers, almanacs) and nonprint sources to access information.
- organize information by classifying or sequencing.
- paraphrase research information accurately and meaningfully.
- create a list of sources (including author and title of a publication) to properly credit and document the work of others.
- use the Internet as a source of information.
- use vocabulary (including Standard American English) that is appropriate for a particular audience or purpose Is this assessed in reading? If not, should be removed from DALs.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- analyze some details that support the main idea.
- partially summarize evidence that supports the main idea.
- make inferences and draw conclusions.
- identify first-person and third-person points of view.
- distinguish among some devices of figurative language (simile, metaphor, personification, hyperbole) and sound devices (onomatopoeia, alliteration).
- describe the relationship between characterization and conflict.
- interpret some effects of author's craft (word choice, sentence structure, use of figurative language and dialogue) on the meaning of a text.
- classify some fiction (including fables, tall tales, and folk tales) and nonfiction (including fables, tall tales, and folk tales) (including biographies, personal essays) texts according to genre characteristics.
- recognize some characteristics of poetry (including stanza, rhyme, and repetition).
- analyze some cause and effect relationships.
- identify some facts and opinions in informational text.
- use some headings, subheadings, print styles, white space, captions, and chapter headings; graphic features (including illustrations, graphs, charts, maps, diagrams, graphic organizers) and functional text features (including tables of contents, glossaries, indexes, appendices) to gain information.
- generate some word meanings of unfamiliar and multiple meaning words by using context clues.
- use some base words and affixes to determine meanings of words
- interpret the meaning of some common idioms.
- generate a research topic.
- use some print sources (for example, books, magazines, charts, graphs, diagrams, dictionaries, encyclopedias, atlases, thesauri, newspapers, almanacs) and non-print sources to access information.
- organize some information.
- paraphrase research information with some accuracy.
- create a basic list of sources.
- use some Internet resources for information.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 5

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- analyze complex relationships between supporting details and main idea.
- analyze texts to draw complex conclusions and make complex inferences.
- interpret complex devices of figurative language (simile, metaphor, personification, hyperbole) and sound devices (onomatopoeia, alliteration).
- interpret complex effects of author's craft (tone, figurative language, dialogue, and imagery) on the meaning of a text.
- interpret the use of stanza, rhyme scheme, repetition, and refrain in poetry.
- predict events based on complex cause-and-effect relationships.
- analyze implicit author bias.
- generate the meanings of challenging unfamiliar and multiple meaning words by using context clues.
- use print sources and non-print sources to access complex information.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- analyze details that support the main idea.
- summarize the central idea and the evidence that supports it.
- analyze texts to draw conclusions and make inferences.
- distinguish between first-person, limited omniscient, and omniscient points of view.
- interpret devices of figurative language (simile, metaphor, personification, hyperbole) and sound devices (onomatopoeia, alliteration).
- analyze texts to distinguish between direct and indirect characterization.
- interpret the effect of author's craft (tone, figurative language, dialogue, and imagery) on the meaning of a text
- analyze works of fiction (including legends and myths) and nonfiction (including speeches and personal essays) by genre characteristics.
- recognize characteristics of poetry (stanza, rhyme scheme, repetition, refrain).
- predict events on the basis of cause-and-effect relationships.
- analyze text to detect author bias (for example, unsupported opinions).

- use titles, print styles, chapter headings, captions, subheadings, and white space; graphic features (illustrations, graphs, charts, maps, diagrams, and graphic organizers); and functional text features (tables of contents, glossaries, indexes, appendices) to gain information.
- use context clues (for example, those that provide an example, a definition, or a restatement) to generate meanings of unfamiliar and multiple meaning words.
- use base words and affixes to determine meanings of words.
- interpret the meanings of idioms and euphemisms.
- clarify and refine a research topic.
- use print sources (books, magazines, charts, graphs, diagrams, dictionaries, encyclopedias, atlases, thesauri, newspapers, almanacs) and nonprint sources to access information.
- select information appropriate for a research topic.
- paraphrase research information accurately and meaningfully.
- create a list of sources that contains information (including author, title, and full publication details) to properly credit and document the work of others.
- use the Internet as a source of information.
- use vocabulary (including Standard American English) that is appropriate for a particular audience or purpose. Is this assessed in reading? If not, should be removed from DALs.
- use appropriate organizational strategies to prepare written works and oral and visual presentations.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- analyze some details that support the main idea.
- summarize the central idea and some of the evidence that supports it.
- analyze texts to draw some conclusions and make some inferences.
- distinguish between first-person and third-person points of view.
- interpret some devices of figurative language (simile, metaphor, personification, hyperbole) and some sound devices (onomatopoeia, alliteration).
- analyze character.
- interpret some effects of author's craft (tone, figurative language, dialogue, and imagery) on the meaning of a text
- classify some works of fiction (including legends and myths) and nonfiction (including speeches and personal essays) by genre characteristics.
- recognize some characteristics of poetry (stanza, rhyme scheme, repetition, refrain).
- predict some events on the basis of cause-and-effect relationships.
- recognize some author bias.
- use some titles, print styles, chapter headings, captions, subheadings, and white space; some graphic features (illustrations, graphs, charts, maps, diagrams, and

graphic organizers); and some functional text features (tables of contents, glossaries, indexes, appendices) to gain information.
- use context clues (for example, those that provide an example, a definition, or a restatement) to generate some meanings of unfamiliar and multiple meaning words.
- use some base words and affixes to determine meanings of words.
- interpret meanings of commonly used idioms and euphemisms.
- clarify a research topic.
- use basic print sources (books, magazines, charts, graphs, diagrams, dictionaries, encyclopedias, atlases, thesauri, newspapers, almanacs) and non-print sources to access information.
- select some information appropriate for a research topic.
- paraphrase some research information accurately and meaningfully.
- create a list of sources that inconsistently credits and documents the work of others.
- use some appropriate organizational strategies to prepare written works and oral and visual presentations.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 6

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- analyze complex central ideas within and across informational texts.
- analyze literary and informational texts to draw complex conclusions and make complex inferences.
- interpret complex devices of figurative language and sound devices.
- analyze complex relationships among characters, setting, and conflict in a given literary text.
- interpret complex effects of the author's craft on the meaning of literary texts.
- predict events based on complex cause-and-effect relationships.
- interpret and evaluate effects of complex text elements.
- interpret information that complex text elements (for example, print styles and chapter headings) provide to the reader.

- interpret information from complex graphic features (for example, illustrations, graphs, charts, maps, diagrams, and graphic organizers).
- generate the meanings of challenging unfamiliar and multiple meaning words by using context clues.
- analyze the meaning of advanced level words by using Greek and Latin roots and affixes within texts.
- use complex appropriate organizational strategies to prepare written works, oral and auditory presentations, and visual presentations.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- analyze central ideas within and across informational texts.
- analyze literary and informational texts to draw conclusions and make inferences.
- differentiate among the first-person, limited-omniscient (third person), and omniscient (third person) points of view.
- interpret devices of figurative language (including simile, metaphor, personification, and hyperbole) and sound devices (including onomatopoeia and alliteration).
- analyze an author's development of characters, setting, and conflict in a given literary text.
- interpret the effect of the author's craft (including tone and the use of flashback and foreshadowing) on the meaning of literary texts.
- compare/contrast main ideas within and across literary texts.
- understand the characteristics of poetry (including stanza, rhyme scheme, repetition, and refrain) and drama (including stage directions and the use of monologues).
- analyze works of fiction (including legends and myths) and works of nonfiction (including speeches and personal essays) by characteristics.
- predict events in literary and informational texts on the basis of cause-and-effect relationships.
- summarize author bias based on the omission of relevant facts and statements of unsupported opinions.
- interpret information that text elements (for example, print styles and chapter headings) provide to the reader.
- interpret information from graphic features (for example, illustrations, graphs, charts, maps, diagrams, and graphic organizers).
- interpret information from functional text features (for example, tables of contents and glossaries).
- identify propaganda techniques (including testimonials and bandwagon) in informational texts.
- use context clues (for example, those that provide an example, a definition, or restatement) to generate the meanings of unfamiliar and multiple-meaning words.

- analyze the meaning of words by using Greek and Latin roots and affixes within texts.
- interpret the meaning of idioms and euphemisms encountered in texts.
- distinguish between the denotation and the connotation of a given word.
- clarify and refine a research topic.
- use direct quotations, paraphrasing, or summaries to incorporate into written, oral, auditory, or visual works the information gathered from a variety of research sources.
- use a standardized system of documentation (for example, a list of sources with full publication information and the use of in-text citations) to properly credit the work of others.
- use vocabulary (including Standard American English) that is appropriate for the particular audience or purpose. Is this assessed in reading? If not, should be removed from DALs.
- use appropriate organizational strategies to prepare written works, oral and auditory presentations, and visual presentations.
- use a variety of print and electronic reference materials.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- analyze some central ideas within and across informational texts.
- draw some conclusions and make some inferences in literary and informational texts.
- sometimes differentiate among the first-person, limited-omniscient (third person), and omniscient (third person) points of view.
- interpret some devices of figurative language (including simile, metaphor, personification, and hyperbole) and sound devices (including onomatopoeia and alliteration).
- sometimes analyze an author's development of characters, setting, and conflict in a given literary text.
- interpret some effects of the author's craft (including tone and the use of flashback and foreshadowing) on the meaning of literary texts.
- compare/contrast some main ideas within and across literary texts.
- understand some characteristics of poetry (including stanza, rhyme scheme, repetition, and refrain) and drama (including stage directions and the use of monologues).
- analyze some works of fiction (including legends and myths) and works of nonfiction (including speeches and personal essays) by characteristics.
- predict some events in literary and informational texts on the basis of cause-and-effect relationships.
- summarize some aspects of author bias based on the omission of relevant facts and statements of unsupported opinions.

- interpret some information from graphic features (for example, illustrations, graphs, charts, maps, diagrams, and graphic organizers).
- interpret some information from functional text features (for example, tables of contents and glossaries).
- identify some propaganda techniques in informational texts.
- use context clues (for example, those that provide an example, a definition, or restatement) to generate some meanings of unfamiliar and multiple-meaning words.
- analyze some meanings of words by using Greek and Latin roots and affixes within texts.
- interpret the meanings of commonly used idioms and euphemisms encountered in texts.
- sometimes distinguish between the denotation and the connotation of a given word.
- clarify a research topic.
- use some direct quotations, paraphrasing, or summaries to incorporate into written, oral, auditory, or visual works the information gathered from a variety of research sources.
- use some aspects of a standardized system of documentation (for example, a list of sources with full publication information and the use of in-text citations) to properly credit the work of others.
- use some appropriate organizational strategies to prepare written works, oral and auditory presentations, and visual presentations.
- use some print and electronic reference materials.

Not Met 1

- There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 7

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- analyze literary texts to draw complex conclusions and make complex inferences.
- interpret complex devices of figurative language.
- interpret the complex and interrelated effects of an author's craft (including tone and the use of imagery, flashback, foreshadowing, symbolism, and irony) on the meaning of literary texts.

- analyze a given literary text to determine complex and universal themes.
- analyze complex central ideas within and across informational texts.
- analyze information within and across texts to draw complex conclusions and make complex inferences.
- analyze information from complex text elements and graphic features in informational texts.
- identify the use of complex propaganda techniques in informational texts.
- generate the meanings of challenging unfamiliar and multiple meaning words by using context clues.
- analyze the meaning of advanced words by using Greek and Latin roots and affixes within texts.
- use complex appropriate organizational strategies to prepare written works, oral and auditory presentations, and visual presentations.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- analyze literary texts to draw conclusions and make inferences.
- explain the effect of point of view on a given narrative text.
- interpret devices of figurative language (including extended metaphor and oxymoron).
- analyze an author's development of the conflict and the individual characters as either static, dynamic, round, or flat in a given literary text.
- interpret the effect of an author's craft (including tone and the use of imagery, flashback, foreshadowing, symbolism, and irony) on the meaning of literary texts.
- analyze a given literary text to determine its theme.
- compare/contrast literary texts from various genres (for example, poetry, drama, novels, and short stories).
- analyze central ideas within and across informational texts.
- analyze information within and across texts to draw conclusions and make inferences.
- identify author bias (for example, word choice and the exclusion and inclusion of particular information).
- analyze the impact that text elements (for example, print styles and chapter headings) have on the meaning of a given informational text.
- analyze information from graphic features (for example, charts and graphs) in informational texts.
- identify the use of propaganda techniques (including glittering generalities and name calling) in informational texts.
- use context clues (for example, those that provide an example, a definition, a restatement, or a comparison/contrast) to generate the meanings of unfamiliar and multiple-meaning words.

- analyze the meaning of words by using Greek and Latin roots and affixes within texts.
- interpret the meanings of idioms and euphemisms encountered in texts.
- interpret the connotations of words to understand the meaning of a given text.
- clarify and refine a research topic.
- use direct quotations, paraphrasing, or summaries to incorporate into written, oral, auditory, or visual works the information gathered from a variety of research sources.
- use a standardized system of documentation (including a list of sources with full publication information and the use of in-text citations) to properly credit the work of others.
- use vocabulary (including Standard American English) that is appropriate for the particular audience or purpose. Is this assessed in reading? If not, should be removed from DALs.
- use appropriate organizational strategies to prepare written works, oral and auditory presentations, and visual presentations.
- use a variety of advanced print and electronic reference materials.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- analyze literary texts to draw some conclusions and make some inferences.
- explain the effect of first person or third person point of view on a given narrative text.
- interpret some devices of figurative language (including extended metaphor and oxymoron).
- partially analyze an author's development of the conflict and some aspects of individual characters (static, dynamic, round, or flat) in a given literary text.
- interpret some effects of an author's craft (including tone and the use of imagery, flashback, foreshadowing, symbolism, and irony) on the meaning of literary texts.
- analyze simple themes in literary texts.
- compare/contrast some aspects of literary texts from various genres (for example, poetry, drama, novels, and short stories).
- analyze some central ideas within and across informational texts.
- analyze information within and across texts to draw some conclusions and make some inferences.
- identify some aspects of author bias (for example, word choice and the exclusion and inclusion of particular information).
- analyze some effects that text elements (for example, print styles and chapter headings) and graphic features (for example, charts and graphs) have on the meaning of a given informational text.
- identify the use of some propaganda techniques in informational texts.

- use context clues (for example, those that provide an example, a definition, a restatement, or a comparison/contrast) to generate some meanings of unfamiliar and multiple-meaning words.
- analyze some meanings of words by using some Greek and Latin roots and affixes within texts.
- interpret the meanings of commonly used idioms and euphemisms encountered in texts.
- interpret some connotations of words to understand the meaning of a given text.
- clarify and refine a simple research topic.
- use some direct quotations, paraphrasing, or summaries to incorporate into written, oral, auditory, or visual works the information gathered from a variety of research sources.
- use some aspects of a standardized system of documentation (for example, a list of sources with publication information and the use of some in-text citations) to properly credit the work of others.
- use some vocabulary (including Standard American English) that is appropriate for the particular audience or purpose.
- use some appropriate organizational strategies to prepare written works, oral and auditory presentations, and visual presentations.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 8

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- compare/contrast complex ideas within and across literary texts to make inferences.
- explain complex effects of point of view on a given literary text.
- interpret complex devices of figurative language.
- analyze literary texts to determine complex themes.
- analyze complex and interrelated effects of the author's craft on the meaning of literary texts.
- compare/contrast complex literary texts from various genres.
- compare/contrast complex central ideas within and across informational texts.

- compare/contrast information within and across texts to draw complex conclusions and make complex inferences.
- analyze the impact that complex text elements and graphic features have on the meaning of informational texts.
- identify the use of complex propaganda techniques in informational texts.
- generate the meanings of challenging unfamiliar and multiple meaning words by using context clues.
- analyze the meaning of advanced words by using Greek and Latin roots and affixes within texts.
- use complex organizational strategies to prepare written works, oral and auditory presentations, and visual presentations.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- compare/contrast ideas within and across literary texts to make inferences.
- explain the effect of point of view on a given literary text.
- interpret devices of figurative language (including extended metaphor, oxymoron, and paradox).
- analyze a given literary text to determine its theme.
- analyze the effects of the author's craft (including tone and the use of imagery, flashback, foreshadowing, symbolism, irony, and allusion) on the meaning of literary texts.
- compare/contrast literary texts from various genres (for example, poetry, drama, novels, and short stories).
- compare/contrast central ideas within and across informational texts.
- compare/contrast information within and across texts to draw conclusions and make inferences.
- analyze informational texts for author bias (for example, word choice and the inclusion and exclusion of particular information).
- analyze the impact that text elements (for example, print styles and chapter headings) have on the meaning of a given informational text.
- analyze information from graphic features (for example, charts and graphs) in informational texts.
- identify the use of propaganda techniques (including card stacking, plain folks, and transfer) in informational texts.
- use context clues (for example, those that provide an example, a definition, a restatement, or a comparison/contrast) to generate the meanings of unfamiliar and multiple-meaning words.
- analyze the meaning of words by using Greek and Latin roots and affixes within texts.
- interpret the meaning of idioms and euphemisms encountered in texts.

- interpret the connotations of words to understand the meaning of a given text.
- clarify and refine a research topic.
- use direct quotations, paraphrasing, or summaries to incorporate into written, oral, auditory, or visual works the information gathered from a variety of research sources.
- use a standardized system of documentation (including a list of sources with full publication information and the use of in-text citations) to properly credit the work of others.
- use vocabulary (including Standard American English) that is appropriate for the particular audience or purpose. Is this assessed in reading? If not, should be removed from DALs.
- use appropriate organizational strategies to prepare written works, oral and auditory presentations, and visual presentations.
- use a variety of print and electronic reference materials.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- compare/contrast ideas within and across literary texts to make some inferences.
- explain the effect of first person or third person point of view on a given literary text.
- interpret some devices of figurative language (including extended metaphor, oxymoron, and paradox).
- analyze some themes in literary texts.
- analyze some effects of the author's craft (including tone and the use of imagery, flashback, foreshadowing, symbolism, irony, and allusion) on the meaning of literary texts.
- compare/contrast some aspects of literary texts from various genres (for example, poetry, drama, novels, and short stories).
- compare/contrast some central ideas within and across informational texts.
- compare/contrast information within and across texts to draw some conclusions and make some inferences.
- analyze informational texts for obvious author bias (for example, word choice and the inclusion and exclusion of particular information).
- analyze some effects that text elements (for example, print styles and chapter headings) and graphic features (for example, charts and graphs) have on the meaning of a given informational text.
- identify the use of some propaganda techniques in informational texts.
- use context clues (for example, those that provide an example, a definition, a restatement, or a comparison/contrast) to generate some meanings of unfamiliar and multiple-meaning words.

- analyze some meanings of words by using some Greek and Latin roots and affixes within texts.
- interpret the meaning of commonly used idioms and euphemisms encountered in texts.
- interpret some connotations of words to understand the meaning of a given text.
- clarify a simple research topic.
- use some direct quotations, paraphrasing, or summaries to incorporate into written, oral, auditory, or visual works the information gathered from a variety of research sources.
- use some aspects of a standardized system of documentation (including a list of sources with publication information and the use of some in-text citations) to properly credit the work of others.
- use some appropriate organizational strategies to prepare written works, oral and auditory presentations, and visual presentations.
- use some print and electronic reference materials.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Writing

Grade 3

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- establish a clear, central idea
- provide specific and relevant supporting details
- sustain focus
- provide well-developed and effective elaboration
- revise for content and development
- establish an effective introduction, body and conclusion
- provide a smooth progression of ideas
- use appropriate transitional devices throughout
- exhibit the use of subtle or embedded transitional techniques

- revise for organization
- use precise and vivid vocabulary
- use effective phrasing, not predictable or obvious
- vary sentence structure/types, promoting rhythmic reading
- demonstrate a strong awareness of audience and task
- use consistent and appropriate tone
- revise for voice
- demonstrate strong command of grammar, capitalization, punctuation, and spelling
- edit for grammar, capitalization, punctuation, and spelling

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- establish a clear, central idea
- provide general supporting details
- elaborate on the topic - may be uneven
- sustain focus - may shift slightly
- revise for content and development with minor limitations
- establish an introduction, body, and conclusion
- provide a logical progression of ideas
- use appropriate transitions
- revise for organization with minor limitations
- use precise and/or vivid vocabulary
- use effective phrasing
- vary sentence structure/types
- demonstrate an awareness of audience and task
- use consistent and appropriate tone
- revise for voice with minor limitations
- demonstrate an adequate command of grammar, capitalization, punctuation, and spelling with minor errors
- edit for grammar, capitalization, punctuation, and spelling with minor limitations.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- attempt a central idea, which may be unclear or shift focus
- provide general details which need elaboration
- revising for content and development with limitations
- attempt an introduction, body, and conclusion which may be weak or ineffective

- provide a progression of ideas which may be simplistic or repetitious
- revising for organization with limitations
- use general vocabulary
- use phrasing which may be ineffective or predictable
- use some sentence variety
- demonstrate some awareness of audience and task
- use appropriate tone
- revising for voice with limitations
- demonstrate limited command of grammar, capitalization, punctuation, and spelling
- editing for conventions of grammar, capitalization, punctuation, and spelling with limitations.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 4

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- establish a clear, central idea
- provide specific and relevant supporting details
- sustain focus
- provide well-developed and effective elaboration
- revise for content and development
- establish an effective introduction, body and conclusion
- provide a smooth progression of ideas
- use appropriate transitional devices throughout
- exhibit the use of subtle or embedded transitional techniques
- revise for organization
- use precise and vivid vocabulary
- use effective phrasing, not predictable or obvious
- vary sentence structure/types, promoting rhythmic reading
- demonstrate a strong awareness of audience and task
- use consistent and appropriate tone
- revise for voice

- demonstrate strong command of grammar, capitalization, punctuation, and spelling
- edit for grammar, capitalization, punctuation, and spelling.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- establish a clear, central idea
- provide general supporting details
- elaborate on the topic - may be uneven
- sustain focus - may shift slightly
- revise for content and development with minor limitations
- establish an introduction, body, and conclusion
- provide a logical progression of ideas
- use appropriate transitions
- revise for organization with minor limitations
- use precise and/or vivid vocabulary
- use effective phrasing
- vary sentence structure/types
- demonstrate an awareness of audience and task
- use consistent and appropriate tone
- revise for voice with minor limitations
- demonstrate an adequate command of grammar, capitalization, punctuation, and spelling with minor errors
- edit for grammar, capitalization, punctuation, and spelling with minor limitation.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- attempt a central idea, which may be unclear or shift focus
- provide general details which need elaboration
- revising for content and development with limitations
- attempt an introduction, body, and conclusion which may be weak or ineffective
- provide a progression of ideas which may be simplistic or repetitious
- revising for organization with limitations
- use general vocabulary
- use phrasing which may be ineffective or predictable
- use some sentence variety
- demonstrate some awareness of audience and task
- use appropriate tone

- revising for voice with limitations
- demonstrate limited command of grammar, capitalization, punctuation, and spelling
- editing for conventions of grammar, capitalization, punctuation, and spelling with limitations.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 5

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- establish a clear, central idea
- provide specific and relevant supporting details
- sustain focus
- provide well-developed and effective elaboration
- revise for content and development
- establish an effective introduction, body and conclusion
- provide a smooth progression of ideas
- use appropriate transitional devices throughout
- exhibit the use of subtle or embedded transitional techniques
- revise for organization
- use precise and vivid vocabulary
- use effective phrasing, not predictable or obvious
- vary sentence structure/types, promoting rhythmic reading
- demonstrate a strong awareness of audience and task
- use consistent and appropriate tone
- revise for voice
- demonstrate strong command of grammar, capitalization, punctuation, and spelling
- edit for grammar, capitalization, punctuation, and spelling

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- establish a clear, central idea
- provide general supporting details
- elaborate on the topic - may be uneven
- sustain focus - may shift slightly
- revise for content and development with minor limitations
- establish an introduction, body, and conclusion
- provide a logical progression of ideas
- use appropriate transitions
- revise for organization with minor limitations
- use precise and/or vivid vocabulary
- use effective phrasing
- vary sentence structure/types
- demonstrate an awareness of audience and task
- use consistent and appropriate tone
- revise for voice with minor limitations
- demonstrate an adequate command of grammar, capitalization, punctuation, and spelling with minor errors
- edit for grammar, capitalization, punctuation, and spelling with minor limitations

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- attempt a central idea, which may be unclear or shift focus
- provide general details which need elaboration
- revising for content and development with limitations
- attempt an introduction, body, and conclusion which may be weak or ineffective
- provide a progression of ideas which may be simplistic or repetitious
- revising for organization with limitations
- use general vocabulary
- use phrasing which may be ineffective or predictable
- use some sentence variety
- demonstrate some awareness of audience and task
- use appropriate tone
- revising for voice with limitations
- demonstrate limited command of grammar, capitalization, punctuation, and spelling

- editing for conventions of grammar, capitalization, punctuation, and spelling with limitation

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 6

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- establish a clear, central idea
- provide specific and relevant supporting details
- sustain focus
- provide well-developed and effective elaboration
- revise for content and development
- establish an effective introduction, body and conclusion
- provide a smooth progression of ideas
- use appropriate transitional devices throughout
- exhibit the use of subtle or embedded transitional techniques
- revise for organization
- use precise and vivid vocabulary
- use effective phrasing, not predictable or obvious
- vary sentence structure/types, promoting rhythmic reading
- demonstrate a strong awareness of audience and task
- use consistent and appropriate tone
- revise for voice
- demonstrate strong command of grammar, capitalization, punctuation, and spelling
- edit for grammar, capitalization, punctuation, and spelling

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- establish a clear, central idea
- provide general supporting details
- elaborate on the topic - may be uneven
- sustain focus - may shift slightly
- revise for content and development with minor limitations
- establish an introduction, body, and conclusion
- provide a logical progression of ideas
- use appropriate transitions
- revise for organization with minor limitations
- use precise and/or vivid vocabulary
- use effective phrasing
- vary sentence structure/types
- demonstrate an awareness of audience and task
- use consistent and appropriate tone
- revise for voice with minor limitations
- demonstrate an adequate command of grammar, capitalization, punctuation, and spelling with minor errors
- edit for grammar, capitalization, punctuation, and spelling with minor limitations

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- attempt a central idea, which may be unclear or shift focus
- provide general details which need elaboration
- revising for content and development with limitations
- attempt an introduction, body, and conclusion which may be weak or ineffective
- provide a progression of ideas which may be simplistic or repetitious
- revising for organization with limitations
- use general vocabulary
- use phrasing which may be ineffective or predictable
- use some sentence variety
- demonstrate some awareness of audience and task
- use appropriate tone
- revising for voice with limitations
- demonstrate limited command of grammar, capitalization, punctuation, and spelling
- editing for conventions of grammar, capitalization, punctuation, and spelling with limitations

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 7

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- establish a clear, central idea
- provide specific and relevant supporting details
- sustain focus
- provide well-developed and effective elaboration
- revise for content and development
- establish an effective introduction, body and conclusion
- provide a smooth progression of ideas
- use appropriate transitional devices throughout
- exhibit the use of subtle or embedded transitional techniques
- revise for organization
- use precise and vivid vocabulary
- use effective phrasing, not predictable or obvious
- vary sentence structure/types, promoting rhythmic reading
- demonstrate a strong awareness of audience and task
- use consistent and appropriate tone
- revise for voice
- demonstrate strong command of grammar, capitalization, punctuation, and spelling
- edit for grammar, capitalization, punctuation, and spelling

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- establish a clear, central idea
- provide general supporting details
- elaborate on the topic - may be uneven
- sustain focus - may shift slightly
- revise for content and development with minor limitations
- establish an introduction, body, and conclusion
- provide a logical progression of ideas

- use appropriate transitions
- revise for organization with minor limitations
- use precise and/or vivid vocabulary
- use effective phrasing
- vary sentence structure/types
- demonstrate an awareness of audience and task
- use consistent and appropriate tone
- revise for voice with minor limitations
- demonstrate an adequate command of grammar, capitalization, punctuation, and spelling with minor errors
- edit for grammar, capitalization, punctuation, and spelling with minor limitation

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- attempt a central idea, which may be unclear or shift focus
- provide general details which need elaboration
- revising for content and development with limitations
- attempt an introduction, body, and conclusion which may be weak or ineffective
- provide a progression of ideas which may be simplistic or repetitious
- revising for organization with limitations
- use general vocabulary
- use phrasing which may be ineffective or predictable
- use some sentence variety
- demonstrate some awareness of audience and task
- use appropriate tone
- revising for voice with limitations
- demonstrate limited command of grammar, capitalization, punctuation, and spelling
- editing for conventions of grammar, capitalization, punctuation, and spelling with limitations

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 8

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- establish a clear, central idea
- provide specific and relevant supporting details
- sustain focus
- provide well-developed and effective elaboration
- revise for content and development
- establish an effective introduction, body and conclusion
- provide a smooth progression of ideas
- use appropriate transitional devices throughout
- exhibit the use of subtle or embedded transitional techniques
- revise for organization
- use precise and vivid vocabulary
- use effective phrasing, not predictable or obvious
- vary sentence structure/types, promoting rhythmic reading
- demonstrate a strong awareness of audience and task
- use consistent and appropriate tone
- revise for voice
- demonstrate strong command of grammar, capitalization, punctuation, and spelling
- edit for grammar, capitalization, punctuation, and spelling

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- establish a clear, central idea
- provide general supporting details
- elaborate on the topic - may be uneven
- sustain focus - may shift slightly
- revise for content and development with minor limitations
- establish an introduction, body, and conclusion
- provide a logical progression of ideas
- use appropriate transitions

- revise for organization with minor limitations
- use precise and/or vivid vocabulary
- use effective phrasing
- vary sentence structure/types
- demonstrate an awareness of audience and task
- use consistent and appropriate tone
- revise for voice with minor limitations
- demonstrate an adequate command of grammar, capitalization, punctuation, and spelling with minor errors
- edit for grammar, capitalization, punctuation, and spelling with minor limitations

NotMet 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- attempt a central idea, which may be unclear or shift focus
- provide general details which need elaboration
- revising for content and development with limitations
- attempt an introduction, body, and conclusion which may be weak or ineffective
- provide a progression of ideas which may be simplistic or repetitious
- revising for organization with limitations
- use general vocabulary
- use phrasing which may be ineffective or predictable
- use some sentence variety
- demonstrate some awareness of audience and task
- use appropriate tone
- revising for voice with limitations
- demonstrate limited command of grammar, capitalization, punctuation, and spelling
- editing for conventions of grammar, capitalization, punctuation, and spelling with limitations

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Mathematics

Grade 3

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- demonstrate an excellent understanding of whole numbers, fractions, and place value.
- perform challenging addition, subtraction, and multiplication calculations.
- analyze the effect of using basic operations on odd and/or even numbers.
- apply procedures to find a missing number in a two-step numeric pattern.
- demonstrate an advanced ability to classify and give examples of geometric parts within the context of figures, and to categorize triangles.
- demonstrate an advanced understanding of making change, telling time, and determining time and length equivalencies in problem solving situations.
- demonstrate a thorough understanding of measurement concepts, comparisons, and estimations in the metric and customary systems of measurement.
- find the range of data in a data display.
- analyze data to make predictions.
- compare the benefits of using tables, bar graphs and dot plots.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- demonstrate an understanding of whole numbers, fractions, and place value.
- perform grade-level addition and subtraction calculations.
- use fact families and number combinations to compare multiplication and division and to solve problems.
- generate strategies to multiply whole numbers.
- use and find a missing number in one-step numeric patterns.
- use symbols to represent an unknown quantity in grade-level equations.
- classify geometric figures.
- identify parts of polygons and circles.
- analyze combinations and subdivisions of polygons and circles.
- identify results of any transformation.
- demonstrate an understanding of making change and telling time.

- recall equivalencies associated with time and length.
- generate strategies to determine perimeter.
- use appropriate tools to measure objects.
- compare, make estimates, and recognize the relationship between units of metric and customary systems of measurement.
- find the range of a set of numbers.
- organize and interpret data in dot plots and pictographs.
- demonstrate an understanding of simple probability.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- demonstrate a limited understanding of whole numbers, fractions and place value.
- perform some grade-level addition and subtraction calculations.
- demonstrate a limited understanding of using fact families and basic number combinations to compare multiplication and division and to solve problems.
- find a missing number in one-step numeric patterns involving addition or subtraction of numbers less than 10.
- demonstrate a limited understanding of classifying geometric figures and identifying parts of polygons and circles.
- analyze basic combinations and subdivisions of polygons and circles.
- identify results of a basic transformation.
- demonstrate a limited understanding of perimeter.
- use appropriate tools to make basic measurements.
- compare and make estimates between basic units of metric and customary systems of measurement.
- demonstrate a limited understanding of range.
- organize and interpret data in tables and bar graphs.
- demonstrate a limited understanding of simple probability.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level

Grade 4

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- demonstrate an excellent understanding of translating between decimals and fractions.
- perform challenging multiplication.
- demonstrate an excellent understanding of division.
- analyze and extend challenging numeric and nonnumeric patterns.
- state and use a two-step rule.
- represent and solve for quantities in complex expressions or equations.
- demonstrate a thorough understanding of the relationships among quadrilaterals.
- compare and contrast two-dimensional nets.
- illustrate the most direct path between points.
- apply multiple conversions between units of measurement.
- determine which measurement equivalency is required in a problem solving situation.
- demonstrate an advanced understanding of estimating angle measures, analyzing perimeter, and determining start times.
- compare data-collection methods.
- demonstrate an excellent understanding of interpreting and organizing information in data displays.
- demonstrate an in-depth understanding of simple probability and possible outcomes.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- demonstrate an understanding of place value, decimals and fractions.
- perform grade-level multiplication .
- demonstrate an understanding of grade-level division.
- analyze and extend numeric patterns and multi-step nonnumeric patterns.
- use a one-step rule.
- represent and solve for quantities in expressions or grade-level equations.
- recognize properties of quadrilaterals and the relationship between shapes and nets.
- represent two- and three-dimensional shapes and geometric figures.
- predict the results of multiple transformations of the same type.
- locate points and illustrate possible paths between points on a coordinate grid.
- use appropriate tools to measure.
- determine perimeter and area.
- estimate angle measures.

- recall and use equivalencies to convert units of measurement.
- apply strategies to determine end time or elapsed time.
- use a thermometer to determine temperature changes.
- interpret and organize data in tables, line graphs, and bar graphs.
- demonstrate an understanding of categorical and numerical data.
- demonstrate an understanding of simple probability and possible outcomes.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- demonstrate a limited understanding of place value, decimals and fractions.
- perform some grade-level multiplication.
- demonstrate a limited understanding of division.
- analyze and extend simple numeric patterns.
- represent and solve for quantities in simple expressions or equations.
- recognize basic properties of quadrilaterals.
- demonstrate a limited understanding of the relationship between basic shapes and their nets, of basic transformations, and of locating points on a coordinate grid.
- use appropriate tools for basic measurements.
- determine basic perimeter and area.
- recall and use basic conversions and equivalencies of time and measurement.
- use a thermometer to determine simple temperature changes.
- interpret and organize data in basic data displays.
- demonstrate basic understanding of simple probability and possible outcomes.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 5

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- demonstrate an excellent understanding of the comparisons of decimal numbers and fractions.

- perform challenging calculations of whole numbers and decimals.
- demonstrate an excellent understanding of division.
- represent complex patterns in algebraic expressions and equations.
- analyze challenging patterns and functions.
- demonstrate a thorough understanding of situations showing change over time, representations of problem situations, and the use of properties.
- compare and contrast the properties of quadrilaterals.
- demonstrate an advanced understanding of congruent shapes, two-dimensional representations of three-dimensional shapes, and rotational symmetry.
- predict the results of multiple transformations that include a rotation.
- demonstrate an excellent understanding of angle measurement, metric unit conversions, measurement equivalencies, area, and elapsed time.
- design a mathematical investigation.
- analyze data-collection methods.
- demonstrate an in-depth understanding of measures of central tendency.
- demonstrate an advanced understanding of probability.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- perform grade-level calculations with and compare whole numbers, decimals, and fractions.
- classify numbers as prime, composite, or neither.
- analyze the magnitude of a digit.
- demonstrate an understanding of division and divisibility rules.
- perform grade-level division.
- generate strategies to find greatest common factor and least common multiple.
- represent and analyze grade-level patterns and functions.
- demonstrate a general understanding of situations showing change over time.
- compare representations of problem situations.
- identify applications of the commutative and associative properties.
- classify shapes as congruent and compare corresponding parts.
- translate between shapes and nets.
- predict results of three or more reflections and /or translations.
- analyze shape to determine line symmetry.
- use appropriate tools and units to measure length and angles.
- apply procedures to determine grade-level elapsed time.
- use equivalencies to convert metric units of measurement.
- apply formulas to determine perimeter, area and volume.
- compare Celsius and Fahrenheit temperature scales.
- recall measurement equivalencies.
- calculate measures of central tendency.

- compute simple probabilities.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- perform some grade-level calculations with and compare whole numbers, common decimals and fractions.
- classify small numbers as prime, composite, or neither.
- demonstrate a limited understanding of division and divisibility rules.
- analyze simple patterns and functions.
- demonstrate a limited understanding of representations of problem situations, and the use of the commutative and associative properties.
- predict results of basic transformations.
- demonstrate a limited understanding of line symmetry.
- use basic tools and units to measure length and angles.
- use basic equivalencies to convert metric units of measurement.
- apply formulas to simple calculations of perimeter, area and volume.
- demonstrate a limited understanding of the measures of central tendency.
- demonstrate a limited understanding of simple probabilities.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 6

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- demonstrate an advanced understanding of percents, decimals, fractions.
- compute challenging calculations with fractions.
- understand ratio/rate and multiplication/division relationships.
- apply strategies to determine the exponential form of powers of 10.
- represent extensive prime factorizations and large whole numbers in exponential form.

- analyze numeric and algebraic patterns (missing multiple terms) to determine a rule.
- apply order of operations to challenging expressions.
- represent algebraic relationships in inequalities.
- solve challenging equations.
- use any combination of properties to show equivalency.
- find the coordinates of a missing vertex of a polygon in more than one quadrant.
- identify and explain the effects of transformations in more than one quadrant.
- analyze the relationship between line and rotational symmetry.
- demonstrate a thorough understanding of similar shapes and circles.
- find surface area using complicated formulas.
- find the perimeter and area of irregular shapes resulting from multiple subdivisions.
- organize information in challenging data displays.
- analyze appropriate use of measures of central tendency.
- demonstrate an advanced understanding of theoretical probability.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- demonstrate a general understanding of percents, decimals, fractions, integers.
- perform grade-level calculations of fractions and decimals.
- determine powers of 10.
- use exponents to represent prime factorizations and whole numbers.
- extend or complete explicit numeric and algebraic patterns missing one term.
- apply order of operations to grade-level expressions.
- represent algebraic relationships in equations.
- solve grade-level equations.
- use grade-level properties to show expressions are equivalent**.**
- name ordered pairs of points, find the coordinates of a missing vertex, and identify transformations in any quadrant.
- demonstrate a general understanding of similar shapes and circles.
- identify complementary and supplementary angles.
- find surface area using simple formulas.
- estimate or find the perimeter and area of irregular shapes and combinations or subdivisions of polygons.
- use proportions to determine unit rates.
- use a scale to determine distance.
- analyze sample data to make predictions.
- organize information in data displays.
- analyze some measures of central tendency.
- demonstrate a general understanding of theoretical probability.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- demonstrate a limited understanding of percents, decimals, fractions, integers.
- perform basic grade-level calculations of fractions and decimals.
- use exponents to represent basic prime factorizations.
- complete basic numeric and algebraic patterns missing one term.
- apply order of operations to basic grade-level expressions.
- represent algebraic relationships in simple equations.
- solve basic grade-level equations.
- demonstrate a limited understanding of properties.
- name some ordered pairs of points and identify some transformations in any quadrant.
- demonstrate a limited understanding of similar shapes and circles.
- estimate the perimeter and area of simple irregular shapes and combinations of basic polygons.
- use proportions to determine basic unit rates.
- use a simple scale to determine distance.
- demonstrate a limited understanding of organizing data displays.
- demonstrate a limited understanding of probability.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 7

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- demonstrate a thorough understanding of percents, rational numbers and square roots.
- apply ratios, rates, proportions, and scale factors to challenging problem-solving situations.
- apply algorithms to perform challenging calculations with fractions and decimals.
- extend and describe challenging geometric patterns, sequences and relationships.
- analyze tables and graphs to describe challenging rates of change.

- solve challenging two-step equations and inequalities.
- demonstrate an advanced understanding of proportional or nonproportional relationships.
- analyze geometric properties to made deductive arguments.
- illustrate challenging cross sections of solids.
- analyze the relationships of angles formed by many parallel lines and a transversal.
- demonstrate an advanced understanding of tessellations, the intersection of geometric shapes, comparisons of and proportional relationships among similar and congruent shapes.
- compute challenging perimeter, area, surface area and volume problems.
- use measurement equivalencies in a problem solving situation.
- convert between the U.S. Customary and metric systems of measurement.
- interpret interquartile ranges.
- interpret the probability of mutually exclusive events.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- demonstrate a general understanding of rational numbers, percentages, square roots and absolute value.
- apply ratios, rates, proportions and scale factors to solve problems.
- translate between standard form and exponential form or scientific notation.
- apply algorithms to perform grade-level calculations with fractions and decimals.
- extend and describe geometric patterns.
- understand constant rates of change.
- solve grade-level two-step equations and inequalities and represent solutions on a number line.
- demonstrate a general understanding of proportional relationships**.**
- analyze the relationships of angles, geometric properties, proportionality, similarity, and congruence.
- demonstrate a general understanding of intersections of geometric shapes, cross sections of solids, different representations of compound figures, and tessellations.
- compute perimeter, area, surface area and volume.
- recall equivalencies in measurement and convert within the U.S. Customary or metric systems of measurement.
- analyze sample data to make predictions, organize displays of data.
- calculate interquartile ranges.
- calculate complex probabilities.
- differentiate between experimental and theoretical probabilities.
- use the fundamental counting principle.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- demonstrate a limited understanding of rational numbers, percentages and square roots.
- apply ratios, rates, proportions, and scale factors to solve simple problems.
- translate between standard form of simple numbers and scientific notation.
- apply algorithms to perform some grade-level calculations with fractions and decimals.
- extend and describe simple geometric patterns.
- solve some grade-level two-step equations and inequalities.
- demonstrate a limited understanding of proportional relationships.
- demonstrate a limited understanding of geometric properties and representations, tessellations, comparisons of and proportional relationships among similar and congruent shapes.
- compute simple perimeter, surface area and volume.
- recall basic equivalencies in measurement and convert basic units within the U.S. Customary or metric systems of measurement.
- demonstrate a limited understanding of data displays.
- demonstrate a limited understanding of theoretical and experimental probability.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 8

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- perform challenging calculations with integers.
- demonstrate a thorough understanding of locating irrational numbers on a number line, comparing rational and irrational numbers, and approximating roots.
- apply the concepts of absolute value, ratios, rates and proportions in problem-solving situations.
- demonstrate an advanced ability to translate among all representations of linear functions.
- use combinations of properties of equality.

- solve challenging multi-step equations.
- identify the *x*- and *y*-intercepts and slope by extending a graph or table.
- determine missing lengths in challenging problem-solving situations.
- use an equation to locate a line on a coordinate plane.
- use multi-step unit analysis to convert between U.S. Customary and metric systems.
- analyze measurement situations to determine necessary level of accuracy.
- apply advanced geometric concepts to challenging calculations of perimeter, area, volume and to explain effects of dimensional change.
- demonstrate an advanced understanding of probability.
- calculate odds in problem situations.
- use measures of central tendency to interpret data in tables and graphs.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- perform grade-level calculations with rational numbers**.**
- demonstrate a general understanding of rational and irrational numbers.
- demonstrate a general understanding of absolute value and approximating roots.
- apply ratios, rates and proportions to solve multi-step problems.
- translate among some representations of linear functions.
- represent algebraic relationships with multi-step equations and inequalities.
- solve grade-level multi-step equations.
- use properties of equality to examine equivalence.
- classify relationships between two variables.
- identify the *x*- and *y*-intercepts and slope from a graph, table or equation.
- use the Pythagorean Theorem and properties of similar shapes to determine any missing lengths.
- locate points and lines on a coordinate plane.
- use multi-step unit analysis to convert within U.S. Customary or metric systems.
- apply formulas to calculate perimeter, area, volume.
- explain effects of dimensional change and dilations.
- organize information into matrices and scatterplots.
- demonstrate general understanding of correlation.
- calculate odds.
- calculate and interpret probability of dependent events.
- find probability using area models.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- demonstrate a limited understanding of rational and irrational numbers.
- approximate basic roots.
- use ratios, rates and proportions to solve basic problems.
- solve basic multi-step equations.
- demonstrate a limited understanding of properties of equality.
- identify the *x*- and *y*-intercepts and slope from a graph.
- use the Pythagorean Theorem and properties of similar shapes to determine some missing lengths.
- convert basic units within U.S. Customary or metric systems.
- perform simple calculations of perimeter, area, volume.
- demonstrate a limited understanding of scatterplots.
- calculate simple odds.
- use basic area models to find probability.
- demonstrate basic understanding of probability of dependent events.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Science

Grade 3

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Exemplify all of the basic steps when conducting a simple investigation.
- Interpret meaning or make predictions using more than one data set.
- Explain why similar investigations might produce different results.
- Determine appropriate units of measurement for instruments.
- Compare the life cycles of various animals.
- Summarize ways special structural adaptations meet the needs of plants and animals in their habitat.
- Summarize how changes in the habitats of plants and animals affect their survival.

- Classify organisms and their roles of producers, consumers and decomposers in a food chain.
- Illustrate how energy is passed from the Sun through plants and to animals.
- Classify types of rocks and soils based on how they were formed.
- Recognize mineral properties that are used to identify specific minerals.
- Identify the types of fossils as molds, casts, and preserved parts of plants and animals.
- Compare saltwater, freshwater and land features by their characteristics.
- Classify and compare slow and rapid processes that cause changes in Earth's surface.
- Compare and summarize the properties of solids, liquids, and gases.
- Explain how adding or removing heat results in changes from one state to another.
- Explain how heat moves easily or not easily from one object to another object.
- Compare the motion of common objects in terms of speed and direction.
- Predict the motion of an object based on the strength of a push or pull or its mass.
- Identify the materials involved in the transfer of the vibrations of sound.
- Explain how a sound could be low pitch and loud volume or a high pitch and soft volume.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Classify objects by their properties or arrange in a sequential order.
- Exemplify most of the basic steps when conducting a simple investigation.
- Predict and compare the results of a simple investigation.
- Infer meaning from data or identify different results in similar investigations using a graph, table, or diagram.
- Exemplify safety procedures and appropriate, accurate use of equipment.
- Illustrate life cycles of seed plants and various animals.
- Explain common physical and behavioral adaptations that allow organisms to survive.
- Recall characteristics of an organism's habitat that allow the organism to survive.
- Explain changes in the habitats of plants and animals that affect their survival.
- Summarize the organization of simple food chains.
- Classify rocks and soils based on common properties.
- Identify common minerals using a minerals identification key.
- Recognize some of the types of common fossils.
- Infer ideas about Earth's early environments from fossils of plants and animals.
- Illustrate some of saltwater, freshwater and land features by their characteristics.
- Exemplify Earth materials that are used as resources.
- Illustrate changes in Earth's surface that are due to slow or rapid processes.
- Classify forms of matter according to observable and measurable properties.

- Explain how water and other substances change from one state to another.
- Compare the properties of heat insulators and conductors.
- Exemplify ways that heat can be produced.
- Identify the position of an object relative to position and distance.
- Illustrate the motion of common objects in terms of speed and direction.
- Explain how the motion of an object is affected by the strength of a push or pull and its mass.
- Explain the relationship between the motion of an object and the pull of gravity.
- Compare pitch and volume of different sounds.
- Explain how the vibration of an object affects pitch.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Classify objects by one observable property.
- Identify common properties used to order a set of objects.
- Recall some of the basic steps used in conducting a simple investigation.
- Predict the outcome of a simple investigation.
- Identify a safety procedure and an appropriate use a piece of equipment.
- Interpret some data communicated in simple graphs, tables, or diagrams.
- Identify a part of a life cycle of a common seed plant or animal.
- Identify some of the parts of seed plants.
- Identify some physical adaptations of common plants or animals that allow them to survive in their habitat.
- Identify the basic needs of plants and animals to survive.
- Recognize when a habitat is not appropriate for some common organisms.
- Identify a change in the habitat as caused by natural events or living things.
- Classify some common Earth materials as rocks or soils based by their physical appearance.
- Recognize that fossils are the remains of plants or animals that lived long ago.
- Identify some of saltwater, freshwater and land features.
- Identify some common Earth materials used as resources.
- Identify some changes in Earth's surface due to natural processes.
- Identify some different forms of matter based on an observable property.
- Identify how water, or some other substance, changes from one state to another.
- Identify some materials that heat can move through easily.
- Identify some sources of heat.
- Identify the position of an object relative to a reference point using some position terms such as "above", "below", "inside of", "underneath", or "on top of."
- Recognize from graphics which object is moving faster or slower.
- Illustrate how the motion of an object is affected by the strength of a push or pull.
- Predict which direction an object will move if dropped.

- Recall that vibrating objects produce sound.
- Identify if a sound is high or low, loud or soft.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 4

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Summarize the differences between quantitative and qualitative observations.
- Determine appropriate units of measurement for instruments.
- Exemplify the characteristics that represent a fair test.
- Distinguish among observations, predictions, and inferences.
- Compare data tables with appropriate graphs.
- Summarize the physical characteristics of the major groups of plants and animals.
- Explain how the characteristics of distinct environments influence the variety of organisms in each.
- Explain how human and animal behaviors are influenced by the signals from their senses.
- Distinguish between an organism's characteristics that are inherited and those acquired over time.
- Compare harmful and helpful ways organisms impact the environment.
- Identify the planets by name and position from the Sun.
- Compare the properties and illustrate the location of Earth, the Moon, and the Sun.
- Summarize how the Sun's energy is related to Earth's weather and food energy.
- Explain how the tilt of Earth's axis and the revolution around the Sun results in the seasons of the year.
- Compare the Earth movements of rotation and revolution.
- Explain the Moon's effect on ocean tides.
- Interpret the change in the length of shadows in relation to the position of the Sun.
- Compare the processes of the water cycle.
- Summarize how clouds are formed.
- Explain how the same weather conditions can occur throughout every season.
- Summarize the weather conditions and effects of severe weather phenomena.

- Exemplify procedures for data collecting and measuring all weather conditions by using appropriate instruments and their units of measure.
- Infer the relationship between brightness and distance from the light source.
- Summarize how light travels and explain what happens when light strikes an object (including reflection, refraction, and absorption).
- Summarize how light behaves when it strikes transparent, translucent, and opaque materials.
- Interpret a diagram of a circuit using the symbols for the components.
- Compare the path of electric current through the components in series and parallel circuits.
- Summarize the properties electromagnets.
- Summarize all of the factors that affect the strength of an electromagnet.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Classify observations as either quantitative or qualitative.
- Exemplify safety procedures and appropriate, accurate use of equipment.
- Summarize most of the characteristics that represent a fair test.
- Distinguish between an observation and a prediction.
- Recognize the correct placement of variables on a line graph.
- Interpret diagrams, tables, and graphs.
- Classify organisms into major groups according to their common physical characteristics.
- Compare the characteristics of distinct environments and organisms found in each.
- Explain how humans and other animals use their senses and sensory organs to detect signals.
- Classify the characteristics of an organism that are inherited or not inherited.
- Explain how an organism’s patterns of behavior are related to its environment.
- Explain how organisms cause changes in their environment.
- Recognize some of the planets by name and position from the Sun.
- Compare the surface and locations of Earth, the Moon, and the Sun.
- Explain some of the ways the Sun affects Earth.
- Explain how the rotation of Earth results in day and night.
- Recall that Earth’s revolution around the Sun takes one year.
- Illustrate the phases of the Moon.
- Predict the length of shadows in relation to the position of the Sun.
- Recognize the purpose of telescopes.
- Summarize the processes of the water cycle.
- Classify three basic types clouds.

- Compare and predict daily and seasonal changes in weather conditions and patterns.
- Compare types of severe weather phenomena and their related safety concerns.
- Exemplify procedures for collecting measuring weather data using appropriate instruments.
- Summarize the basic properties of light.
- Illustrate that light is made up of many different colors.
- Interpret diagrams of light rays striking different types of materials to show the behavior of reflection, refraction, or absorption.
- Compare how light behaves when it strikes transparent, translucent, or opaque materials.
- Explain how electricity can be transformed into other forms of energy.
- Summarize the function of the components of complete circuits.
- Illustrate the path of electric current in circuits.
- Classify materials as either conductors or insulators of electricity.
- Summarize the properties of magnets and some of the factors that affect the strength of electromagnets.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Illustrate some instruments used in an investigation.
- Identify some of the basic characteristics that represent a fair test.
- Recognize a statement that is a prediction.
- Interpret simple diagrams, tables, or graphs.
- Identify common safety equipment.
- Classify common organisms as plants or animals or common animals that have a backbone.
- Identify common animals as a fish, amphibian, reptile, bird or mammal or insect.
- Exemplify typical common plants and animals with their distinct environments.
- Recall types and functions of sensory organs of humans and other animals.
- Identify some common characteristics of an organism that are passed down from the parents to the offspring.
- Explain how an organism’s patterns of behavior are related to availability of food, water, or shelter.
- Identify some change in the environment that is caused by an organism.
- Identify Earth as one of many planets in the solar system that orbit the Sun.
- Identify the type of surface of Earth, the Moon, and the Sun.
- Recognize that the Sun gives off heat and light.
- Recall that Earth spins on its axis and goes around the Sun.
- Recall that the Sun appears to change positions throughout the day and causes shadows which change in length throughout the day.

- Recognize some of the processes of the water cycle based on illustrations.
- Compare some daily and seasonal changes in weather conditions.
- Identify thunderstorms, hurricanes, and tornadoes as severe weather.
- Identify some weather instruments and their uses.
- Predict some common weather conditions from data collected through observation.
- Compare objects of different brightness.
- Recall that light can be reflected from some objects.
- Interpret diagrams of light rays striking common types of materials to show the behavior of reflection or absorption.
- Recognize an electrical device that transforms electrical energy into light or heat or sound.
- Identify the components (including wire, switch, battery, and light bulb) of a simple circuit.
- Identify materials as conductors or insulators.
- Recall that magnets have poles that attract or repel.
- Identify an electromagnet.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 5

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Identify the independent (manipulated), dependent (responding) and controlled variables in an investigation.
- Summarize the steps for conducting a controlled investigation where one variable is manipulated at a time.
- Determine appropriate units of measurement for instruments.
- Exemplify line graphs with proper placement of the variables.
- Evaluate results of an investigation to formulate a valid conclusion based on evidence and communicate the findings of the evaluation.
- Summarize all of the steps of a simple technological design process to develop a solution or a product.
- Identify all of the major structures of the cell.
- Summarize the composition of an ecosystem considering biotic and abiotic factors.

- Classify organizational levels of an ecosystem including populations and communities.
- Compare the characteristics of different ecosystems.
- Identify all of the roles of organisms as they interact and depend on one another in more complex food chains and webs.
- Summarize ways that limiting factors influence the balance of nature in ecosystems.
- Explain how natural processes affect oceans/land in constructive and destructive ways.
- Compare and summarize the characteristics of continental and oceanic landforms.
- Explain how waves, currents, tides, and storms affect the features of the shore zone.
- Compare the ways that waves, currents and tides move water.
- Explain how human impact the environment in harmful and helpful ways.
- Compare and exemplify the physical properties of the states of matter.
- Classify various substances as mixtures based on characteristics.
- Exemplify multi-step procedures to separate mixtures.
- Explain how the solute and the solvent in a solution determine the concentration.
- Infer how a given factor or combination of factors will affect the rate of dissolving.
- Interpret a diagram of an object changing position over time in order to determine the speed of the object.
- Summarize how unbalanced forces affect rate and direction of motion.
- Summarize how combining two or more factors changes the effects of friction on the motion of objects.
- Compare the motion of objects by using distance-time graphs.
- Compare the motion of two objects with different masses or different amounts of force.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Identify the independent (manipulated), dependent (responding) variables or variables that are kept the same in an investigation.
- Exemplify most of the steps for conducting a controlled investigation that manipulates one variable at a time.
- Exemplify safety procedures and appropriate, accurate use of equipment.
- Identify the correct placement of variables on a line graph.
- Interpret data from an investigation and recognize a valid conclusion based on evidence.
- Summarize some of the steps of a simple technological design process to develop a solution/product.

- Recognize the cell as the smallest unit of life and identify some of the major structures of the cell.
- Exemplify some of the factors of an ecosystem as biotic or abiotic.
- Exemplify the characteristics of some of the different ecosystems.
- Identify some of the roles of organisms in food chains and webs.
- Explain how limiting factors affect populations in ecosystems.
- Exemplify the natural processes that affect oceans and land in constructive or destructive ways.
- Classify some landforms as continental or oceanic.
- Illustrate how waves, currents, tides, or storms affect some of the features of the shore zone.
- Classify ocean water movement as a wave, current, or tide by its characteristics.
- Exemplify human activity that affects land and oceans.
- Compare some of the physical properties of the states of matter.
- Summarize the characteristics of a mixture.
- Exemplify the processes for separating mixtures.
- Identify the solute and the solvent in a solution.
- Explain how temperature change, particle size, and stirring affect the rate of dissolving.
- Exemplify when some substances are mixed together, they form a new substance that cannot be easily separated.
- Explain how the mixing or dissolving of foreign substances is related to the pollution.
- Illustrate the effects of force on motion.
- Summarize the motion of an object in terms of position, direction, or speed.
- Explain how unbalanced forces affect the rate and direction of motion in objects.
- Explain ways to change the effect that friction has on the motion of objects.
- Interpret a graph that illustrates the motion of an object.
- Explain how a change of force or a change in mass affects the motion of an object.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Identify a variable that is tested or is kept the same in an investigation.
- Recognize some of the basic steps for conducting a controlled scientific investigation.
- Illustrate some instruments used in an investigation.
- Interpret simple diagrams, tables, or graphs.
- Identify common safety equipment.
- Interpret simple data from an investigation and communicate findings.
- Identify a product of technology.

- Recall that cells are found in all living organisms.
- Classify the factors of an ecosystem as living or non-living.
- Classify an ecosystem as terrestrial or aquatic.
- Identify some of the roles of organisms in simple food chains and webs.
- Exemplify limiting factors that affect populations in ecosystems.
- Identify natural processes that affect ocean and landforms by building them up or breaking them down.
- Identify some landforms as continental or oceanic.
- Identify ways that waves and storms affect the ocean shore zone.
- Recognize that ocean water moves in different ways as waves, as currents, as tides.
- Exemplify some common human activities that have helped or harmed the land or the oceans.
- Compare some of the physical properties of the states of matter.
- Identify substances as a mixture based on its properties.
- Identify one of the steps in separating a mixture.
- Identify the material being dissolved in a solution.
- Recognize the methods that can be used to cause materials to dissolve faster.
- Identify some factors responsible for pollution.
- Illustrate the effects that some forces have on motion.
- Illustrate the motion of an object in terms of position, direction, or speed.
- Illustrate the effects of unbalanced forces on an object.
- Recognize that the amount of friction between surfaces can be increased or decreased.
- Recognize that a distance-time line graph illustrates the motion of an object.
- Predict how a change in force or a change in mass will affect the rate of motion of an object.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 6

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Recognize the appropriate degree of accuracy and unit of measurement for the tools and instruments being used in a controlled scientific investigation.

- Differentiate between observation (qualitative and quantitative) and inference during the analysis and interpretation of data.
- Summarize how analyzed data is used to draw a valid conclusion.
- Compare the physical characteristics/properties of organisms, objects, and materials using information on a dichotomous key.
- Exemplify technology products designed by applying technological design process and evaluating the design.
- Summarize a scientific investigation that includes all the necessary steps to include the communicating of conclusions to others.
- Summarize the characteristics that all organisms share (to include the ability to reproduce).
- Recognize the hierarchical structure of the classification (taxonomy) of organisms that includes the seven major levels or categories of living things (kingdom, phylum, class, order, family, genus, and species) in order of complexity.
- Identify an example of a scientific name recognizing the genus and species in a given name.
- Compare the characteristic structures of various groups of plants to include monocot and dicot flowering plants.
- Summarize details about the function of the various flowering plant structures needed for defense, survival, and reproduction.
- Summarize each of the processes in the life cycle of flowering plants.
- Differentiate between processes and structures that result in asexual reproduction from those that result in sexual reproduction in flowering plants.
- Compare photosynthesis and respiration in terms of starting materials and what is produced.
- Explain how plants respond to external stimuli through dormancy or tropisms.
- Compare the characteristic structures of invertebrates and vertebrate animals.
- Classify structures for defense, movement, and resource obtainment by their function.
- Explain why endothermic and exothermic animals have a different need for amounts of food for energy.
- Explain how environmental stimuli cause physical responses in animals.
- Exemplify animals that use the behavioral responses of hibernation, migration, and various defense mechanisms.
- Exemplify animal behaviors as learned – by imprinting or conditioning - or inherited (instinct).
- Compare the composition and structure of Earth's atmospheric layers.
- Summarize interrelationships among the dynamic processes of the water cycle.
- Summarize how weather condition patterns associated with major cloud types and combinations of cloud types can be used in forecasting.
- Summarize the relationships of the movement of air masses and frontal boundaries and of high and low pressure systems to storms (including hurricanes and tornadoes) and other weather conditions.
- Interpret sciences on a weather instrument or on a sequence of weather maps to predict changing weather conditions and weather patterns.

- Summarize the process known as the greenhouse effect.
- Explain how convection affects weather patterns near bodies of water and in climate zones.
- Explain the influence of global winds and the jet stream on weather and climatic conditions in both hemispheres.
- Identify the properties of the two forms of mechanical energy – potential and kinetic.
- Explain how energy is transformed between potential and kinetic mechanical energy in accordance to the law of conservation of energy.
- Explain how electricity and magnetism are interrelated by using descriptions, models and diagrams of electromagnets, generators, and simple electrical motors.
- Illustrate energy transformations into two or more forms of energy within electric circuits.
- Compare the directional transfer of heat energy through conduction, convection, and radiation based on how particles behave and temperature differences.
- Identify situations that show work being done based on the criteria.
- Infer how different designs of the same simple machine will reduce the amount of force required to do work.
- Interpret a diagram of a complex machine to identify the functions/uses of the simple machines present.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Exemplify appropriate instruments being used safely and accurately
- Exemplify scientific observations and inferences during the interpretation of data.
- Classify organisms, objects, and materials using a dichotomous key.
- Sequence the steps in a controlled investigation and of the technological design process.
- Exemplify safety equipment and procedures when conducting scientific investigations.
- Summarize some of the characteristics that all organisms share.
- Recall that organisms are classified into categories according to similarities in structure.
- Compare some of the characteristic structures of various groups of plants.
- Summarize and illustrate the basic structures and their functions in flowering plants
- Summarize the life cycle of flowering plants and the processes required for plant survival
- Exemplify asexual reproduction in flowering plants
- Exemplify ways that plants respond to external stimuli.
- Summarize the characteristic structures of both invertebrates and vertebrate animals

- Summarize the basic functions of the structures of animals that allow them to survive.
- Classify vertebrates as endothermic or ectothermic.
- Explain and illustrate how environmental stimuli cause physical responses in animals
- Summarize how the internal stimuli of animals ensure their survival.
- Exemplify animal behavior as learned or inherited.
- Summarize the composition of Earth's atmosphere and the processes of the water cycle
- Classify clouds according to elevation and associated weather conditions.
- Summarize some of the relationships of the movement of air masses and frontal boundaries to storms and other weather conditions.
- Illustrate the appropriate weather instruments and tools to collect weather data.
- Predict weather conditions and patterns based on weather data.
- Explain how solar energy affects Earth's atmosphere and surface.
- Identify the convection region or ocean currents that influence climates of the United States.
- Explain the influence of global winds on the Northern Hemisphere's weather and climate.
- Identify the sources and properties of various forms of energy.
- Illustrate energy transformations according to the law of conservation of energy.
- Illustrate the relationship between electricity and magnetism.
- Illustrate the directional transfer of heat energy.
- Recognize that energy is the ability to do work.
- Illustrate how a simple machine helps reduce the amount of force required to do work.
- Illustrate ways that simple machines are used in common tools and in complex machines.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Recognize appropriate instruments being used safely and accurately
- Exemplify scientific observations and inferences during the interpretation of data.
- Classify organisms, objects, and materials using a dichotomous key.
- Identify the steps in a controlled investigation and of the technological design process.
- Identify safety equipment and procedures when conducting scientific investigations.
- Exemplify some of the characteristics that all organisms share.
- Recognize that organisms are classified into categories according to similarities in structure.
- Exemplify some of the characteristic structures of various groups of plants.

- Identify and illustrate the basic structures and their functions in flowering plants
- Exemplify the life cycle of flowering plants and the processes required for plant survival
- Recall asexual reproduction in flowering plants
- Recognize some ways that plants respond to external stimuli.
- Classify some of the characteristic structures of both invertebrates and vertebrate animals
- Exemplify basic functions of some structures of animals that allow them to survive.
- Exemplify some vertebrates as endothermic or exothermic.
- Classify and illustrate how environmental stimuli cause physical responses in animals
- Exemplify how the internal stimuli of animals ensure their survival.
- Recall animal behavior as learned or inherited.
- Recognize the composition of Earth's atmosphere and the processes of the water cycle
- Exemplify clouds according to elevation and associated weather conditions.
- Interpret some of the relationships of the movement of air masses and frontal boundaries to storms and other weather conditions.
- Recall the appropriate weather instruments and tools to collect weather data.
- Classify weather conditions and patterns based on weather data.
- Infer ways solar energy affects Earth's atmosphere and surface.
- Recognize the convection region or ocean currents that influence climates of the United States.
- Summarize the influence of global winds on the Northern Hemisphere's weather and climate. Identify the sources and properties of various forms of energy.
- Recognize energy transformations according to the law of conservation of energy.
- Recognize the relationship between electricity and magnetism.
- Recognize that energy is the ability to do work.
- Exemplify how a simple machine helps reduce the amount of force required to do work.
- Recognize ways that simple machines are used in common tools and in complex machines.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 7

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Recognize the accuracy and unit of measurement for scientific instruments.
- Exemplify hypotheses and the experimental variables in a testable question.
- Explain the importance for validity of repeated trials and a well-chosen sample size
- Explain the relationship between independent and dependent variables using graphs, tables and charts.
- Analyze a conclusion drawn from a scientific investigation
- Explain how all the cellular processes are essential to the survival of the organism.
- Summarize how the genotype and phenotype of offspring are determined.
- Compare allele combinations on Punnett squares
- Explain how environmental factors could cause a change in an organism's phenotype
- Identify types of cells and tissues.
- Identify an organ and its body system based on the description of its function.
- Explain the effects of some diseases on the major organs and body systems.
- Summarize the characteristics of the levels of organization of ecosystems.
- Summarize the roles that organisms play in the energy flow through an ecosystem.
- Explain the effect of soil quality on an ecosystem.
- Summarize the importance of the location and movement of water on Earth's surface.
- Explain implications of depleting or conserving natural resources.
- Infer from a list of physical properties whether an object is a metal or nonmetal.
- Use the periodic table to classify and compare elements
- Interpret a chemical formula to identify the component parts of the substance.
- Distinguish between acids and bases by their chemical properties.
- Explain how a balanced equation supports the law of conservation of matter.
- Compare physical properties of matter to the chemical properties.
- Compare physical changes to chemical changes.
- Summarize the evidences for chemical changes.
- Distinguish between bacteria and protists based on their body shapes and structures.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Select questions that can be answered through a controlled investigation.

- Explain reasons for testing one independent variable at a time.
- Summarize the steps for a controlled investigation and for a technological design process.
- Explain the importance of repeated trials.
- Interpret data from graphs, tables, and charts to draw conclusions about the variables.
- Critique a conclusion drawn from a scientific investigation using a graph, table, or diagram.
- Exemplify appropriate safety procedures and appropriate and accurate use of equipment.
- Summarize and compare the structures and functions of plant and animal cell components.
- Compare the body shapes of bacteria and body structures of some protists.
- Explain how some of the cellular processes are essential to the survival of the organism.
- Summarize how genetic traits are passed from parent to offspring.
- Interpret information on Punnett squares to predict inherited monohybrid traits.
- Distinguish between inherited traits and those acquired from environmental factors.
- Summarize the levels of structural organization within the human body
- Recall the major organs of the human body and their functions within their body systems.
- Summarize the relationships of the major body systems
- Summarize the characteristics of a particular common disease and the body system it affects.
- Exemplify the major levels of organization within ecosystems
- Illustrate energy flow in food chains, food webs, and energy pyramids.
- Exemplify ways that natural hazards, limiting factors or changes in populations can affect the environment.
- Summarize how soil quality is important to the characteristics of an ecosystem.
- Illustrate and interpret a diagram of groundwater zones and drainage basins.
- Classify and exemplify natural resources as renewable and nonrenewable.
- Recognize that matter is composed of atoms
- Classify and illustrate matter as element, compound, or mixture.
- Compare and summarize the physical properties of metals and nonmetals.
- Use the periodic table to identify the basic organization of the elements.
- Translate chemical symbols and formulas of common substances.
- Distinguish between acids and bases and summarize how indicators are used.
- Identify reactants and products in a chemical equation
- Recognize the characteristics of a balanced equation.
- Exemplify physical properties of matter and the chemical property of reactivity.
- Exemplify physical changes and chemical changes.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Recall that the human body is made of cells and has organs that group together to form systems.
- Identify some of the major human body organs and the organ system of which they are part.
- Summarize the major function of some of the individual body systems.
- Classify some common diseases as infectious or noninfectious and identify the major organ or organ systems that are affected.
- Identify some of the major levels of organization of the living world.
- Interpret diagrams or exemplify the organization of a simple food chain and simple food web.
- Identify some factors that can cause changes in an environment that can affect the organisms living there.
- Identify the basic properties of soil.
- Compare groundwater and surface water.
- Exemplify ways that humans use water.
- Identify some resources as renewable or nonrenewable.
- Summarize some ways that conservation can be accomplished.
- Identify elements as the type of matter found on the periodic table.
- Identify some physical properties of metals and of nonmetals.
- Identify the basic information for each element on the periodic table.
- Compare a chemical symbol to a chemical formula and recognize some common symbols (to include oxygen, hydrogen and water).
- Classify a substance as an acid or base given its pH.
- Recall the pH range associated with acidic, basic, and neutral solutions.
- Recall the law of conservation of matter.
- Identify some physical properties of matter.
- Identify some physical changes of matter.
- Recall physical characteristics are passed from parents to offspring.
- Recognize that a Punnett square is used to understand that traits are passed from parents to offspring.
- Identify some structures of plant and animal cells.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 8

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Summarize all the steps of a controlled investigation and generate questions for further study
- Identify ways to ensure valid (accurate and dependable) scientific investigations.
- Analyze an explanation or conclusion to determine validity.
- Recognize the accuracy and unit of measurement for scientific instruments
- Explain how adaptation relates to natural selection.
- Infer how environmental changes affect a species over time
- Compare the effects of various catastrophic events.
- Compare diversity of life forms in various geologic time periods.
- Compare complex rock layering and index fossils to determine points of relative time.
- Explain how scientists use data to determine Earth's internal structure.
- Interpret seismographic data.
- Explain the theory of plate tectonics and landforms that result.
- Illustrate geologic features using imagery and complex topographical maps.
- Compare characteristics and movements of planets, asteroids, meteors, and comets.
- Summarize how all of surface features of the Sun may affect Earth.
- Explain all of the effects of the motions of Earth and the Moon as they orbit the Sun.
- Explain the effects of the tilt of Earth on the amount of heating on Earth's surface
- Explain the difference between mass and weight.
- Compare the various technologies used to study space.
- Represent the motion of an object with a scale drawing measuring.
- Analyze the effects of forces on the speed and direction of objects.
- Explain the effects of mass and force on motion.
- Analyze the effect of balanced and unbalanced forces on an object's motion.
- Infer the influence of inertia on the motion of an object.
- Distinguish between mechanical and electromagnetic waves.
- Summarize all of the factors that influence the basic properties and behavior of waves
- Explain the science of hearing and sight
- Summarize all of the factors that result in the perception of color

- Compare the wavelength, frequency, and energy of waves in various parts of the electromagnetic spectrum.

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Summarize the steps for a controlled investigation and for a technological design process.
- Select explanations and conclusions from experimental data.
- Explain the importance of and requirements for replication of investigations.
- Exemplify appropriate safety procedures and appropriate and accurate use of equipment.
- Explain how biological adaptations of populations enhance their survival.
- Summarize how scientists study past environments, catastrophes, and life-forms.
- Use the geologic time scale and recognize the relationship among the units.
- Infer the relative age of rocks and fossils and diversity of past life on Earth.
- Summarize the factors that can contribute to the extinction of a species.
- Summarize the three layers of Earth and the theory of plate tectonics.
- Illustrate the use of seismic waves.
- Explain how earthquakes occur and infer an earthquake's epicenter.
- Explain how types of rocks are interrelated in the rock cycle.
- Summarize the importance of Earth resources on the basis of their properties.
- Illustrate the creation and changing of landforms.
- Identify and illustrate geologic features using imagery and topographic maps.
- Summarize the characteristics and movements of objects in the solar system.
- Summarize how some of the surface features of the Sun may affect Earth.
- Identify the shapes and composition of galaxies and the measurement unit light year.
- Explain some of the effects of the motions of Earth and the Moon as they orbit the Sun.
- Interpret the effects of the tilt of Earth on the length of day and seasons.
- Explain how gravitational forces are influenced by mass and distance.
- Explain the effects of gravity on tides and planetary orbits.
- Exemplify the purposes of some of the technology used to study space.
- Interpret distance-time graphs in terms of position, direction, or speed.
- Use the formula, v=d/t, for average speed to solve real-world problems.
- Exemplify effects of gravity and friction on the speed or direction of an object.
- Predict how varying the amount of force or mass will affect motion.
- Illustrate forces as balanced or unbalanced.
- Summarize and illustrate the property of inertia.
- Recall that waves transmit energy and can be classified as mechanical or electromagnetic.

- Summarize some factors that influence the basic properties and behavior of waves.
- Summarize the science of hearing and sight.
- Summarize some of the factors that result in the perception of color.
- Summarize the characteristics of waves in the electromagnetic spectrum.

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Recognize the steps of technological design that were used to produce a familiar product.
- Recognize a valid conclusion from a scientific investigation using charts, graphs, and tables.
- Recognize a question that can be tested with a scientific investigation
- Identify reasons why replicated investigations may have different results.
- Illustrate the appropriate tool used in an investigation.
- Exemplify common safety equipment needed for conducting scientific investigations.
- Identify an adaptation that enhances survival of an organism.
- Infer a past environment from some types of fossils.
- Exemplify an event that would be catastrophic to Earth and its possible impact on life-forms.
- Identify a geologic time scale.
- Interpret a chart to identify major life forms in specific eras.
- Recognize the sequential order of rock layers.
- Identify a natural or man-made factor that could contribute to the extinction of a species.
- Identify the layers from Earth's surface to center from a diagram or illustration.
- Identify the three types of seismic waves.
- Recognize the use of a compass to show that Earth has a magnetic field.
- Identify the purpose of a seismogram.
- Classify rock types as sedimentary, igneous and metamorphic based on how the rocks are formed.
- Identify a physical or chemical property of a mineral, ore, or fossil fuel that makes it useful.
- Recognize that tectonic plates form Earth's crust and that they move.
- Identify some basic factors that contribute to the creation or change of. Earth's surface
- Identify and illustrate some geologic features of South Carolina and other regions of the world through the use of imagery (including aerial photography and satellite imagery), and simple topographic maps.
- Classify some of the objects in the solar system based on characteristics and location.

- Recognize some surface features of the Sun.
- Explain how solar flares may affect Earth.
- Identify the motions of Earth and the Moon and the effects of these motions as they orbit the Sun.
- Identify a particular season in the northern hemisphere based on the tilt of Earth's axis and Earth's revolution around the sun.
- Identify two factors that affect the pull of gravity.
- Identify gravity as the force that keeps planets in orbit around the Sun and affects tides.
- Recognize that a balance measures mass and a spring scale measures weight.
- Identify the name of Earth's galaxy.
- Identify some of the types of telescopes based on a given purpose.
- Recognize distance-time graphs as a representation of speed
- Identify the variables (position, direction, speed) of motion.
- Identify the variables (direction and time) involved in problems related to speed.
- Identify the effects of friction on the speed of object or gravity on the direction an object falls.
- Illustrate how an increase in the mass of an object or a greater force applied affects how it moves.
- Infer whether forces acting on an object are balanced or unbalanced.
- Identify waves as vibrations.
- Exemplify mechanical or electromagnetic waves.
- Identify some of the basic properties of waves (frequency, amplitude, wavelength, and speed).
- Illustrate some of the basic behaviors of waves (refraction, reflection, transmission).
- Illustrate the three major parts of the ear related to hearing.
- Illustrate the major parts of the eye related to sight.
- Recognize that reflected light from a material results in the color perceived.
- Illustrate the wavelength difference of the color spectrum of visible light.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Social Studies

Grade 3

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Identify key features of SC on a map and categorize regions of SC by physical and human characteristics
- Use thematic maps of SC to interpret information
- Recognize and explain examples of human environment interaction in SC
- Explain and compare the motives, activities and accomplishments and summarize the impact of European exploration and colonization of SC
- Compare the different Native American nations in SC and their interaction with the colonists
- Explain the institution of slavery and the experiences of African Americans in the settlement and development of SC
- Analyze the causes and effects summarize the key leaders and conflicts of the American Revolution in SC and SC's role
- Outline the current structure of state government
- Explain the causes and course of the Civil War, the effects of the war on SC, and SC's role in these events Compare the daily lives of various social classes in SC before, during and after the Civil War
- Compare the daily lives of various social classes in SC before, during and after the Civil War and summarize the effects of Reconstruction in SC
- Summarize developments in industry, technology, and the economy in SC in the late 19th century and the 20th century
- Summarize Jim Crow Laws and the subsequent civil rights movement in SC
- Explain the impact and causes of emigration from SC and internal migration of South Carolinians
- Explain the effects of the Great Depression and the New Deal on SC
- Summarize the rights and responsibilities of contemporary South Carolinians

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Identify key features and categorize regions by physical and human characteristics of SC on a map
- Use thematic maps of SC to interpret information
- Recognize and explain examples of human environment interaction in SC
- Explain and compare the motives, activities and accomplishments and summarize the impact of European exploration and colonization of SC
- Compare the different Native American nations in SC and their interaction with the colonists
- Explain the institution of slavery and the experiences of African Americans in the settlement and development of SC
- Analyze the causes and effects and summarize the key leaders and conflicts of the American Revolution and SC's role
- Outline the current structure of state government
- Explain the causes and course of the Civil War, the effects of the war on SC, and SC's role in these events
- Compare the daily lives of various social classes in SC before, during and after the Civil War
- Summarize the effects of Reconstruction in SC
- Summarize developments in industry, technology, and the economy in SC in the late 19th century and the 20th century
- Summarize Jim Crow Laws and the subsequent civil rights movement in SC
- Explain the impact and causes of emigration from SC and internal migration of South Carolinians
- Explain the effects of the Great Depression and the New Deal on SC
- Summarize the rights and responsibilities of contemporary South Carolinians

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Identify some key features, name the regions, and describe some physical and human characteristics of SC on a map
- Use thematic maps of SC to interpret some information
- Recognize examples of human environment interaction in SC
- Explain and compare some motives, activities, accomplishments and impacts of European exploration and colonization of SC
- Describe at least one Native American nation in SC and its interaction with the colonists
- Explain the institution of slavery and some experiences of African Americans in the settlement and development of SC
- Recall the causes and effects and some key leaders and conflicts of the American Revolution in SC
- Name the three branches of our state government

- Explain some causes of the Civil War, the effects of the war on SC, and SC's role in these events
- Compare the daily lives of some social classes in SC during the Civil War
- Summarize some effects of Reconstruction in SC
- Summarize a few developments in industry, technology, and the economy in SC in the late 19th century and the 20th century
- Tell what the Jim Crow Laws were.
- Describe the civil rights movement in SC
- Explain several causes of emigration from SC and several causes of internal migration of South Carolinians
- Explain some effects of the Great Depression and the New Deal on SC
- Name some rights and responsibilities of contemporary South Carolinians

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 4

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Use the land bridge theory to illustrate the spread and compare cultural groupings of Native American populations
- Explain and compare the motives, factors, accomplishments, development and impact of exploration and colonization of the New World by the English, French, and Spanish
- Explain the establishment and impact of indentured servitude and slavery on life in the New World and the development of the American colonies
- Explain how conflicts and cooperation among the Native Americans, Europeans, and Africans influenced colonial events
- Summarize the political and economic causes, events, key battles and leaders, daily life/roles of diverse groups, allies and effects of the American Revolution
- Explain the major ideas and philosophies of government expressed in the Declaration of Independence, the Articles of Confederation, and the Constitution
- Classify government activities according to the three branches of the federal government and give examples of the system of checks and balances
- Explain the role of the Bill of Rights in the ratification of the Constitution

- Compare the accomplishments of early leaders and the social/economic differences of the 2 political parties that formed (in the 1790s) in the development of the new nation
- Provide examples of how American democracy places important responsibilities on citizens
- Identify and locate on a map the key territorial acquisitions and explain the causes, processes, and political and social impacts of Westward Expansion on the United States
- Explain how specific legislation, events and key abolitionist leaders affected the institution of slavery in the territories and the US
- Compare the industrial North and the agricultural South before the Civil War
- Explain specific events and issues that led to and summarize significant events, battles, strategies, and turning points, roles/accomplishments of key figures and African Americans, and effects of the Civil War on the nation

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Use the land bridge theory to illustrate the spread and compare cultural groupings of Native American populations
- Explain and compare the motives, factors, accomplishments, development and impact of exploration and colonization of the New World by the English, French, and Spanish
- Explain the impact of indentured servitude and slavery on life in the New World and the colonies
- Explain how conflicts and cooperation among the Native Americans, Europeans, and Africans influenced colonial events
- Summarize the political and economic causes, events, key battles and leaders, daily life/roles of diverse groups, allies and effects of the American Revolution
- Explain the major ideas and philosophies of government expressed in the Declaration of Independence, the Articles of Confederation, and the Constitution
- Classify government activities according to the three branches of the federal government and give examples of the system of checks and balances
- Explain the role of the Bill of Rights in the ratification of the Constitution
- Provide examples of how American democracy places important responsibilities on citizens
- Compare the roles and accomplishments of early leaders in the development of the new nation
- Compare the accomplishments of early leaders and the social/economic differences of the 2 political parties that formed (in the 1790s) in the development of the new nation

- Identify and locate on a map the key territorial acquisitions and explain the causes, processes, and political and social impacts of Westward Expansion on the United States
- Explain how specific legislation, events and key abolitionist leaders affected the institution of slavery in the territories and the US
- Compare the industrial North and the agricultural South before the Civil War
- Explain specific events and issues that led to and summarize significant events, battles, strategies, and turning points, roles/accomplishments of key figures and African Americans, and effects of the Civil War on the nation

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Use the land bridge theory to name and explain the Native American cultural groupings in America
- Explain and compare some motives, factors, accomplishments and impacts of exploration and colonization of the New World by the English, Spanish and French in their various locations
- Explain the impact of indentured servitude and slavery on life in the New World
- Explain how some conflicts and cooperation among the Native Americans, Europeans, and Africans influenced colonial events
- Explain some political and economic causes, events, key battles and leaders, daily life/roles of diverse groups, allies and effects of the American Revolution
- Explain a few major ideas and philosophies of government expressed in the Declaration of Independence, the Articles of Confederation, and the Constitution.
- Classify government activities according to the three branches of the federal government and give an example of the system of checks and balances
- Explain how the Bill of Rights was added to the Constitution
- Compare some accomplishments of early leaders and the social/economic differences of the 2 political parties that formed (in the 1790s) in the development of the new nation
- Provide some examples of how American democracy places important responsibilities on citizens
- Identify and locate on a map some key territorial acquisitions and explain some causes, processes, and political and social impacts of Westward Expansion on the United States
- Explain how some specific legislation, events and key abolitionist leaders affected the institution of slavery in the territories and the US
- Describe the industrial North and the agricultural South before the Civil War
- Explain a few specific events and issues that led to and summarize a few significant events, battles, strategies, and turning points, roles/accomplishments of key figures and African Americans, and effects of the Civil War on the nation

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 5

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Explain and compare events, goals and social or economic impacts of Reconstruction on various populations
- Summarize the provisions and purposes of the 13th, 14th, and 15th Amendments
- Explain the rise of discriminatory laws on groups during and after Reconstruction
- Explain effects of travel, settlement, and transportation on the environment and people of the West and vise versa
- Provide examples of conflict and cooperation between groups in the West
- Identify prominent inventors or scientists and summarize the new inventions or technologies in the Industrial Revolution
- Explain immigration and summarize contributions of immigrants to America during the Industrial Revolution
- Explain how building cities and industries led to progressive reforms
- Summarize actions by the United States that contributed to its rise as a world power
- Summarize changes in daily life in the 1920s, the stock market crash of 1929 and the Great Depression
- Explain the immediate and lasting effects on American workers caused by innovations of the New Deal
- Explain the principal events or key figures, key developments in technology, aviation, weaponry, or communication, and political or social impacts related to US involvement in World War II
- Summarize the impacts of the cultural development, economic changes, and examples of worldwide economic interdependence in the post World War II era
- Explain the advancement of the civil rights movement in the United States
- Explain the political alliances and policies that affected and the events that occurred during the Cold War era
- Use a map to identify world regions where the US has been politically involved since the fall of the communist states and describe some changes in United States foreign policy since 1992
- Explain some environmental changes that humans have made and their consequences

- Explain some technological innovations since 1990 that have changed daily life in the United States
- Identify some examples of cultural exchange between the United States and other countries
- Compare the position of the United States on the world stage following World War I, World War II, or the collapse of communist states

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Explain and compare events, goals and social or economic impacts of Reconstruction on various populations
- Summarize the provisions and purposes of the 13th, 14th, and 15th Amendments
- Explain the rise of discriminatory laws on groups during and after Reconstruction
- Explain effects of travel, settlement, and transportation on the environment and people of the West and vise versa
- Provide examples of conflict and cooperation between groups in the West
- Identify prominent inventors or scientists and summarize the new inventions or technologies in the Industrial Revolution
- Explain immigration and summarize contributions of immigrants to America during the Industrial Revolution
- Explain how building cities and industries led to progressive reforms
- Summarize actions by the United States that contributed to its rise as a world power
- Summarize changes in daily life in the 1920s, the stock market crash of 1929 and the Great Depression
- Explain the immediate and lasting effects on American workers caused by innovations of the New Deal
- Explain the principal events or key figures, key developments in technology, aviation, weaponry, or communication, and political or social impacts related to US involvement in World War II
- Summarize the impacts of the cultural development, economic changes, and examples of worldwide economic interdependence in the post World War II era
- Explain the advancement of the civil rights movement in the United States
- Explain the political alliances and policies that affected and the events that occurred during the Cold War era
- Use a map to identify world regions where the US has been politically involved since the fall of the communist states and describe some changes in United States foreign policy since 1992
- Explain some environmental changes that humans have made and their consequences
- Explain some technological innovations since 1990 that have changed daily life in the United States

- Identify some examples of cultural exchange between the United States and other countries
- Compare the position of the United States on the world stage following World War I, World War II, or the collapse of communist states

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Explain and compare some events, goals and social or economic impacts of Reconstruction on various populations
- Summarize some provisions and purposes of the 13th, 14th, and 15th Amendments
- Explain the rise of discriminatory laws on groups during and after Reconstruction
- Explain some effects of travel, settlement, and transportation on the environment and people of the West and vice versa
- Provide some examples of conflict and cooperation between groups in the West
- Identify some prominent inventors or scientists and summarize some of the new inventions or technologies in the Industrial Revolution
- Explain immigration and summarize some contributions of immigrants to America during the Industrial Revolution
- Explain how building cities and industries led to some progressive reforms
- Summarize some actions by the United States that contributed to its rise as a world power
- Summarize some changes in daily life in the 1920s, the stock market crash of 1929 and the Great Depression
- Explain some immediate and lasting effects on American workers caused by innovations of the New Deal
- Explain some principal events or key figures, some key developments in technology, aviation, weaponry, or communication, and some political or social impacts related to US involvement in World War II
- Summarize some impacts of the cultural development, some economic changes, and some examples of worldwide economic interdependence in the post World War II era
- Explain the civil rights movement in the United States
- Explain some political alliances and policies that affected and some events that occurred during the Cold War era
- Use a map to identify some world regions where the US has been politically involved since the fall of the communist states and describe some changes in United States foreign policy since 1992
- Explain some environmental changes that humans have made and their consequences
- Explain some technological innovations since 1990 that have changed daily life in the United States

- Identify some examples of cultural exchange between the United States and other countries
- Compare the position of the United States on the world stage following World War I, World War II, or the collapse of communist states.

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 6

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Analyze the characteristics of hunter-gatherer communities and explain the emergence of agriculture and its effect on early human communities
- Compare the features and contributions of and explain the role of economics and the natural environment in the development of early civilizations
- Compare major religions and philosophies
- Summarize the significant features of classical Greek, Roman, Indian, and Chinese civilizations
- Explain the expansion and the decline of the Roman Empire
- Explain feudalism and its relationship to the development of European nation states and monarchies
- Explain the development of English government and legal practices
- Summarize the course and effects of the Crusades
- Explain the influence of the Roman Catholic Church in Europe during the Middle Ages
- Illustrate the origins and the spread of the bubonic plague and explain the impact of the plague on society
- Explain the contributions that the Byzantine Empire made to the world
- Compare the features and major contributions African civilizations of Ghana, Mali, and Songhai
- Summarize the features and major contributions of Chinese and Japanese civilizations
- Compare the features and major contributions of Aztecan, Mayan, and Incan civilizations
- Summarize the characteristics of Islamic civilization and its expansion
- Identify the key figures and contributions and explain the origins, features, spread and lasting contributions of the Renaissance and the Reformation

- Illustrate the principal routes of exploration and trade between Europe, Asia, Africa, and the Americas during the age of European exploration
- Compare the incentives of the various European countries to explore and settle new lands
- Explain the effect of the Columbian Exchange on Europe, Asia, Africa, and the Americas

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Analyze the characteristics of hunter-gatherer communities and explain the emergence of agriculture and its effect on early human communities
- Compare the features and contributions of and explain the role of economics and the natural environment in the development of early civilizations
- Compare major religions and philosophies
- Summarize the significant features of classical Greek, Roman, Indian, and Chinese civilizations
- Explain the expansion and the decline of the Roman Empire
- Explain feudalism and its relationship to the development of European nation states and monarchies
- Explain the development of English government and legal practices
- Summarize the course and effects of the Crusades
- Explain the influence of the Roman Catholic Church in Europe during the Middle Ages
- Illustrate the origins and the spread of the bubonic plague and explain the impact of the plague on society
- Explain the contributions that the Byzantine Empire made to the world
- Compare the features and major contributions African civilizations of Ghana, Mali, and Songhai
- Summarize the features and major contributions of Chinese and Japanese civilizations
- Compare the features and major contributions of Aztecan, Mayan, and Incan civilizations
- Summarize the characteristics of Islamic civilization and its expansion
- Identify the key figures and contributions and explain the origins, features, spread and lasting contributions of the Renaissance and the Reformation
- Illustrate the principal routes of exploration and trade between Europe, Asia, Africa, and the Americas during the age of European exploration
- Compare the incentives of the various European countries to explore and settle new lands
- Explain the effect of the Columbian Exchange on Europe, Asia, Africa, and the Americas

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Recall the characteristics of hunter-gatherer communities, identify one agricultural technique that led to and explain the emergence of agriculture and some of its effects on early human communities
- Describe at least one feature and contribution of and explain one way the natural environment shaped early river valley civilizations
- Explain how trade networks and new agricultural techniques assisted in the development of early civilizations
- Describe major religions and philosophies
- Recall a significant feature of classical Greek, Roman, Indian, and Chinese civilizations
- Identify geographic areas of Roman expansion and at least one weakness that led to the decline of the Roman Empire
- Explain feudalism
- Explain the importance of the Magna Carta
- Summarize the course of the Crusades and explain one lasting effect
- Explain one area of influence of the Roman Catholic Church in Europe during the Middle Ages
- Illustrate the spread of the bubonic plague and explain the impact of the plague on society
- Explain one contribution that the Byzantine Empire made to the world
- Recall the features and major contributions African civilizations of Ghana, Mali, and Songhai
- Recall the features and major contributions of Chinese and Japanese civilizations
- Recall the features and major contributions of Aztecan, Mayan, and Incan civilizations
- Summarize one characteristic of Islamic civilization and illustrate its expansion on a map
- Identify a key figure and his/her contributions and explain the principal cause, key event, significant features and lasting contributions of the Renaissance and the Reformation
- Identify on a map the principal routes of exploration and trade between Europe, Asia, Africa, and the Americas during the age of European exploration
- Summarize the incentives of two European countries to explore and settle new lands
- Summarize the effects of the Columbian Exchange on the Americas

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 7

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Identify the colonial expansion of European powers through 1770
- Explain how the development of gunpowder and navigational advances impacted the world
- Compare how European nations exercised political and economic influence in the Americas
- Summarize the effects of European colonization on African and Asian nations
- Explain the emergence of capitalism during the 17th and 18th centuries
- Summarize the essential characteristics of the limited and unlimited governments
- Summarize the ideas and influence of the Enlightenment
- Outline the role and purposes of a constitution
- Summarize the achievements and contributions of the scientific revolution
- Explain the causes and effects of the French Revolution
- Compare the development of Latin American independence movements
- Explain the causes, course and impact of the Industrial Revolution in Europe, Japan, and the United States
- Compare nationalist movements across Europe in the 19th century
- Illustrate and summarize European imperialism
- Explain the role of the Spanish-American War in US imperialism
- Compare reactions to colonialism in the late 19th and early 20th centuries
- Explain Japan's expansion into East Asia
- Explain the causes, events, outcome and effects of World War I
- Explain the worldwide depression that took place in the 1930s
- Summarize the rise of totalitarian governments prior to World War II
- Explain the causes, events, and outcomes of World War II
- Summarize the impact of the Holocaust on European society and Jewish culture
- Summarize the political and economic transformation of Europe, and explain the changes that occurred in the Middle East and compare nationalist and independence movements in the post-World War II period
- Summarize the events of the Cold War
- Illustrate on a time line the events that contributed to the collapse of communist governments in Europe
- Explain the impact of the information, technological, and communications revolutions
- Explain human influences on the environment

- Summarize global efforts to advance human rights
- Compare the opportunities for women around the world
- Explain the impact of increasing global economic interdependence in the late 20th century and the early 21st century

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Identify the colonial expansion of European powers through 1770
- Explain how the development of gunpowder and navigational advances impacted the world
- Compare how European nations exercised political and economic influence in the Americas
- Summarize the effects of European colonization on African and Asian nations
- Explain the emergence of capitalism during the 17th and 18th centuries
- Summarize the essential characteristics of the limited and unlimited governments
- Summarize the ideas and influence of the Enlightenment
- Outline the role and purposes of a constitution
- Summarize the achievements and contributions of the scientific revolution
- Explain the causes and effects of the French Revolution
- Compare the development of Latin American independence movements
- Explain the causes, course and impact of the Industrial Revolution in Europe, Japan, and the United States
- Compare nationalist movements across Europe in the 19th century
- Illustrate and summarize European imperialism
- Explain the role of the Spanish-American War in US imperialism
- Compare reactions to colonialism in the late 19th and early 20th centuries
- Explain Japan's expansion into East Asia
- Explain the causes, events, outcome and effects of World War I
- Explain the worldwide depression that took place in the 1930s
- Summarize the rise of totalitarian governments prior to World War II
- Explain the causes, events, and outcomes of World War II
- Summarize the impact of the Holocaust on European society and Jewish culture
- Summarize the political and economic transformation of Europe, explain the changes that occurred in the Middle East and compare nationalist and independence movements in the post-World War II period
- Summarize the events of the Cold War
- Illustrate on a time line the events that contributed to the collapse of communist governments in Europe
- Explain the impact of the information, technological, and communications revolutions
- Explain human influences on the environment

- Summarize global efforts to advance human rights
- Compare the opportunities for women around the world
- Explain the impact of increasing global economic interdependence in the late 20th century and the early 21st century

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Identify the colonial expansion of two European powers through 1770
- Name one way the development of gunpowder and navigational advances impacted the world
- Describe the trading post empires, plantation colonies, and settler colonies that the Europeans set up in America
- Summarize European colonization in Africa and Asia
- Explain capitalism
- Summarize one essential characteristic of limited and unlimited governments
- Summarize the key idea and one lasting influence of the Enlightenment
- Outline the key purpose of a constitution
- Summarize key achievements and contributions of the scientific revolution
- Explain one cause and effect of the French Revolution
- Summarize one of the Latin American independence movements
- Summarize the causes and impact of the Industrial Revolution in Europe, Japan, and the United States
- Summarize the unification of Italy and Germany and Napoleon's role in the spread of nationalism
- Illustrate European imperialism
- Summarize and illustrate US land holdings as a result of the Spanish-American War
- Summarize one of the rebellions to colonialism
- Summarize and illustrate key areas of Japan's expansion into East Asia
- Explain the causes and effects of World War I
- Summarize the worldwide depression that took place in the 1930s
- Identify the totalitarian governments in Europe prior to World War II
- Explain key causes, events, and outcomes of World War II
- Describe the impact of the Holocaust
- Summarize the political transformation of Europe after World War II
- Summarize a few key events and the major participants of the Cold War
- Explain the changes that brought about the state of Israel
- Describe two nationalist and independence movements in the post-World War II period
- Identify on a time line the key events that contributed to the collapse of communist governments in Europe

- Summarize the impact of the information, technological, and communications revolutions
- Explain two ways that humans influence the environment
- Summarize global efforts to advance human rights
- Summarize the conditions for women around the world
- Describe some elements of the increasing global economic interdependence in the late 20th century and the early 21st century

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Grade 8

Exemplary 5

The student demonstrates performance that consistently exceeds expectations for a typical student at this grade level.

Exemplary 4

The student demonstrates performance that exceeds expectations for a typical student at this grade level. The student uses complex strategies and advanced skills in order to:

- Summarize the culture, political systems, and daily life of the Native Americans in SC
- Categorize events according to the ways they improved or worsened relations between Native Americans and European settlers
- Summarize the history of European settlement in the province of Carolina
- Explain the growth of the African-American population during the colonial period and the significance of African Americans in the developing culture and economy of South Carolina
- Summarize the significant changes to South Carolina's government during the colonial period
- Explain how South Carolinians used resources to gain economic prosperity
- Summarize the involvement of South Carolina in the French-British colonial rivalry
- Summarize the interests, roles, course and effects of South Carolina and her people in the events leading to, during and after the American Revolution
- Summarize events related to the adoption of South Carolina's first constitution, the role of South Carolinians in the Continental Congress and the ratification of the United States Constitution
- Explain the economic and political tensions between the people of the Upcountry and the Lowcountry of South Carolina
- Explain the importance of agriculture in antebellum South Carolina
- Draw conclusions about the causes of sectionalism and explain the attitudes about and events leading to South Carolina's secession from the Union

- Compare the military strategies of the North and South with regard to specific events and geographic locations in South Carolina
- Summarize the effects of the Civil War on daily life in South Carolina
- Explain the purposes, effects, successes and failures of Reconstruction in South Carolina
- Summarize the ratification of South Carolina's constitution of 1868
- Summarize the conditions in South Carolina following the end of Reconstruction
- Compare key aspects of the Populist movement in South Carolina
- Summarize the changes that occurred in South Carolina agriculture and industry during the late nineteenth century
- Compare US and South Carolina immigration and migration patterns of the late 19th century
- Summarize the impact of war and natural disasters on South Carolinians in the late nineteenth century
- Summarize the progressive reform movement in South Carolina
- Explain the impact and effects of World War I on South Carolina
- Explain the causes and the effects of changes in South Carolina culture during the 1920s
- Explain the effects and impact of the Great Depression and New Deal programs on South Carolina
- Summarize the significant aspects of the economic growth experienced by South Carolina during and following World War II
- Provide examples of the expanding role of tourism in South Carolina's economy
- Explain causes and effects of agricultural decline in South Carolina
- Explain the factors that influenced the economic opportunities of African American South Carolinians during the latter 20th century
- Explain the economic impact of 20th century events on South Carolina

Met

The student demonstrates performance that meets expectations at this grade level. The student has a general understanding of the concepts and processes described in the academic standards for this grade and should be able to:

- Summarize the culture, political systems, and daily life of the Native Americans in SC
- Categorize events according to the ways they improved or worsened relations between Native Americans and European settlers
- Summarize the history of European settlement in the province of Carolina
- Explain the growth of the African-American population during the colonial period and the significance of African Americans in the developing culture and economy of South Carolina
- Summarize the significant changes to South Carolina's government during the colonial period
- Explain how South Carolinians used resources to gain economic prosperity

- Summarize the involvement of South Carolina in the French-British colonial rivalry
- Summarize the interests, roles, course and effects of South Carolina and her people in the events leading to, during and after the American Revolution
- Summarize events related to the adoption of South Carolina's first constitution, the role of South Carolinians in the Continental Congress and the ratification of the United States Constitution
- Explain the economic and political tensions between the people of the Upcountry and the Lowcountry of South Carolina
- Explain the importance of agriculture in antebellum South Carolina
- Draw conclusions about the causes of sectionalism and explain the attitudes about and events leading to South Carolina's secession from the Union
- Compare the military strategies of the North and South with regard to specific events and geographic locations in South Carolina
- Summarize the effects of the Civil War on daily life in South Carolina
- Explain the purposes, effects, successes and failures of Reconstruction in South Carolina
- Summarize the ratification of South Carolina's constitution of 1868
- Summarize the conditions in South Carolina following the end of Reconstruction
- Compare key aspects of the Populist movement in South Carolina
- Summarize the changes that occurred in South Carolina agriculture and industry during the late nineteenth century
- Compare US and South Carolina immigration and migration patterns of the late 19th century
- Summarize the impact of war and natural disasters on South Carolinians in the late nineteenth century
- Summarize the progressive reform movement in South Carolina
- Explain the impact and effects of World War I on South Carolina
- Explain the causes and the effects of changes in South Carolina culture during the 1920s
- Explain the effects and impact of the Great Depression and New Deal programs on South Carolina
- Summarize the significant aspects of the economic growth experienced by South Carolina during and following World War II
- Provide examples of the expanding role of tourism in South Carolina's economy
- Explain causes and effects of agricultural decline in South Carolina
- Explain the factors that influenced the economic opportunities of African American South Carolinians during the latter 20th century
- Explain the economic impact of 20th century events on South Carolina

Not Met 2

The student demonstrates performance that sometimes meets expectations at this grade level. The student has a general understanding of some but not all of the concepts and processes described in the academic standards for this grade and should be able to:

- Describe the culture and daily life of the Native Americans in SC
- Describe the events that either improved or worsened relations between Native Americans and European settlers
- Place key events of the European settlement in the province of Carolina on a timeline
- Explain the significance of African Americans in the developing culture and economy of South Carolina
- Summarize the change from the proprietary regime to the royal government during the colonial period
- Explain which resources South Carolinians used to gain economic prosperity
- Explain how the French and Indian War affected South Carolina
- Summarize the interests, roles and key conflicts of South Carolina and her people in the events leading to and during the American Revolution
- Summarize the role of South Carolinians in the Continental Congress and the ratification of the United States Constitution
- Explain the tensions between the people of the Upcountry and the Lowcountry of South Carolina
- Summarize the importance of agriculture in antebellum South Carolina
- Summarize several areas of conflict that caused sectionalism in the US and explain the events leading to South Carolina's secession from the Union
- Describe the military strategies of the North and South with regard to specific events and geographic locations in South Carolina
- Discuss two ways the Civil War altered daily life in South Carolina
- Summarize Reconstruction- its effects on daily life and some successes and failures in South Carolina
- Recall events leading to South Carolina's constitution of 1868
- Describe two features of life in South Carolina following the end of Reconstruction
- Describe a few key aspects of the Populist movement in South Carolina
- Summarize two changes that occurred in South Carolina agriculture and industry during the late nineteenth century
- Summarize US and South Carolina immigration and migration patterns of the late 19th century
- Recognize the impact of war and natural disasters on South Carolinians in the late nineteenth century
- Describe two elements of the progressive reform movement in South Carolina
- Describe the effects of World War I on South Carolina
- Summarize changes in South Carolina culture during the 1920s
- Summarize the key effects and lasting impacts of the Great Depression and New Deal programs on South Carolina
- Summarize two significant aspects of the economic growth experienced by South Carolina during and following World War II
- Provide two examples of the expanding role of tourism in South Carolina's economy
- Summarize the agricultural decline in South Carolina

- Summarize the factors that influenced the economic opportunities of African American South Carolinians during the latter 20th century
- Summarize the key economic impact of 20th century events on South Carolina

Not Met 1

There is a significant need for additional instructional opportunities to achieve the Met level.

Appendix B: Meeting Agenda

South Carolina Bookmarking Meeting Agenda

Sunday August 2, 2009
3:30 – 4:30 Hotel Check-in
4:30 – 5:00 Meeting Check-in
5:00 – 5:30 Dinner in Carolina Ballroom
5:30 - 7:30 Training for panelists in Carolina Ballroom

Monday – Tuesday August 3-4, 2009 *(times are approximate depending on work completion)*
7:00 – 8:30 Breakfast and Check-in in Atrium
8:30 – 12:00 Meeting in Large Groups by Subject
12:00 – 1:00 Lunch in Atrium
1:00 – 5:00 Continue in Large Groups by Subject

	Room
Mathematics	*Palmetto I and II*
Reading &Research	*Carolina Ballroom A, B & C*
Writing	*Carolina Ballroom D*
Science	*Carolina Ballroom E*
Social Studies	*Carolina Ballroom F, G & H*

Wednesday and Thursday August 5-6, 2009 *(times are approximate depending on work completion)*
7:00 – 8:30 Breakfast and Check-in in Atrium
8:30 – 12:00 Meeting in Small Groups by Subject/Grade
12:00 – 1:00 Lunch in Atrium
1:00 – 5:00 Continue in Small Groups by Subject/Grade

	Grade	*Room*	*Grade*	*Room*
Mathematics	*3 & 4*	*Palmetto I*	*7 & 8*	*Palmetto II*
Reading &Research	*3 & 4*	*Carolina Ballroom B*	*7 & 8*	*Carolina Ballroom C*
Writing	*3 & 4*	*Carolina Ballroom A*	*7 & 8*	*Carolina Ballroom D*
Science	*3 & 4*	*Carolina Ballroom E*	*7 & 8*	*Carolina Ballroom F*
Social Studies	*3 & 4*	*Carolina Ballroom G*	*7 & 8*	*Carolina Ballroom H*

Friday August 7, 2009

7:00 – 8:30 Breakfast and Check-in in Atrium
8:30 – 12:00 Meeting in Large Group by Subject
12:00 – 1:00 Lunch in Atrium
1:00 – 5:00 Meeting in Large Group

	Room
Mathematics	*Palmetto I and II*
Reading &Research	*Carolina Ballroom A, B & C*
Writing	*Carolina Ballroom D*
Science	*Carolina Ballroom E*
Social Studies	*Carolina Ballroom F, G & H*

Appendix C: Cutscores and Standard Errors of Measurement by Round

Reading and Research		Round 1		Round 2		Round 3	
Grade	Level	Median	SE of Median	Median	SE of Median	Median	SE of Median
3	NM1/NM2	-0.774	0.0672	-0.774	0.0628	-0.774	0.0437
	NM2/M	0.207	0.0871	0.207	0.0608	0.207	0.0816
	M/Ex4	1.003	0.1076	1.003	0.0586	1.003	0.0519
	Ex4/Ex5	1.528	0.0791	1.396	0.0486	NA	NA
4	NM1/NM2	-0.466	0.0392	-0.488	0.0389	-0.488	0.0360
	NM2/M	0.388	0.0886	0.369	0.0631	0.369	0.0345
	M/Ex4	1.569	0.0642	1.386	0.0455	1.569	0.0578
	Ex4/Ex5	1.687	0.0272	1.841	0.0241	NA	NA
5	NM1/NM2	-0.397	0.0502	-0.397	0.0459	-0.397	0.0411
	NM2/M	0.465	0.0452	0.255	0.0386	0.255	0.0383
	M/Ex4	1.459	0.0385	1.406	0.0433	1.406	0.0190
	Ex4/Ex5	1.694	0.0174	1.694	0.0210	NA	NA
6	NM1/NM2	-0.177	0.1000	-0.375	0.0304	-0.375	0.0366
	NM2/M	0.390	0.0742	0.313	0.0362	0.313	0.0373
	M/Ex4	1.680	0.0885	1.271	0.0634	1.376	0.0691
	Ex4/Ex5	1.834	0.0341	1.834	0.0284	NA	NA
7	NM1/NM2	-0.463	0.1177	-0.253	0.1512	-0.213	0.1508
	NM2/M	0.342	0.1096	0.342	0.0754	0.342	0.0408
	M/Ex4	1.347	0.0918	1.112	0.0713	1.318	0.0623
	Ex4/Ex5	1.548	0.0399	1.715	0.0274	NA	NA
8	NM1/NM2	-0.247	0.0747	-0.247	0.0913	-0.247	0.0771
	NM2/M	0.504	0.0429	0.352	0.0407	0.352	0.0461
	M/Ex4	1.525	0.0640	1.525	0.0269	1.525	0.0269
	Ex4/Ex5	1.954	0.0773	1.954	0.0713	NA	NA

Writing		Round 1		Round 2		Round 3	
Grade	Level	Median	SE of Median	Median	SE of Median	Median	SE of Median
3	NM1/NM2	-1.122	0.1106	-1.122	0.0107	-1.122	0.0079
	NM2/M	0.139	0.0321	-0.064	0.0373	-0.064	0.0307
	M/Ex4	1.254	0.0763	0.936	0.0385	0.936	0.0256
	Ex4/Ex5	1.534	0.0425	1.534	0.0134	NA	NA
4	NM1/NM2	-0.499	0.1253	-1.198	0.1025	-1.198	0.0917
	NM2/M	0.362	0.0997	0.096	0.0864	0.096	0.0697
	M/Ex4	1.367	0.1196	1.465	0.1235	1.465	0.1149
	Ex4/Ex5	1.979	0.0668	1.979	0.0000	NA	NA
5	NM1/NM2	-1.178	0.0814	-1.178	0.0470	-1.214	0.0521
	NM2/M	-0.148	0.0923	-0.211	0.0451	-0.211	0.0417
	M/Ex4	1.116	0.0698	1.050	0.0387	1.050	0.0624
	Ex4/Ex5	2.105	0.0458	2.105	0.0204	NA	NA
6	NM1/NM2	-1.188	0.1713	-1.188	0.1050	-1.188	0.0859
	NM2/M	0.299	0.1256	0.009	0.0885	0.009	0.0836
	M/Ex4	1.409	0.1150	1.409	0.0971	1.409	0.1057
	Ex4/Ex5	1.980	0.0214	1.980	0.0199	NA	NA
7	NM1/NM2	-1.150	0.1651	-0.339	0.1527	-0.745	0.1518
	NM2/M	0.274	0.0931	0.377	0.0604	0.311	0.0723
	M/Ex4	1.278	0.0759	1.339	0.0796	1.353	0.0838
	Ex4/Ex5	1.735	0.0466	1.958	0.0416	NA	NA
8	NM1/NM2	-1.053	0.1050	-1.053	0.0936	-1.053	0.0877
	NM2/M	0.382	0.1005	0.382	0.0378	0.375	0.0801
	M/Ex4	1.681	0.0611	1.717	0.0544	1.717	0.0495
	Ex4/Ex5	2.080	0.0520	2.186	0.0141	NA	NA

Mathematics		Round 1		Round 2		Round 3	
Grade	Level	Median	SE of Median	Median	SE of Median	Median	SE of Median
3	NM1/NM2	-0.464	0.0291	-0.464	0.0207	-0.464	0.0194
	NM2/M	0.231	0.0304	0.197	0.0249	0.197	0.0170
	M/Ex4	1.306	0.0572	1.207	0.0466	1.207	0.0460
	Ex4/Ex5	1.625	0.0138	1.625	0.0142	NA	NA
4	NM1/NM2	-0.515	0.0385	-0.566	0.0334	-0.601	0.0128
	NM2/M	-0.088	0.0580	-0.088	0.0430	-0.088	0.0464
	M/Ex4	1.103	0.0634	1.103	0.0586	1.103	0.0675
	Ex4/Ex5	1.755	0.0596	1.755	0.0710	NA	NA
5	NM1/NM2	-0.964	0.0868	-0.964	0.0495	-0.964	0.0346
	NM2/M	0.057	0.0838	-0.157	0.0624	-0.157	0.0518
	M/Ex4	0.967	0.0695	0.967	0.0678	0.967	0.0736
	Ex4/Ex5	1.755	0.0261	1.755	0.0232	NA	NA
6	NM1/NM2	-0.119	0.0702	-0.388	0.0462	-0.388	0.0337
	NM2/M	0.427	0.0608	0.160	0.0452	-0.077	0.0370
	M/Ex4	1.366	0.0589	1.180	0.0535	1.165	0.0559
	Ex4/Ex5	1.597	0.0157	1.528	0.0154	NA	NA
7	NM1/NM2	-0.472	0.0160	-0.48	0.0130	-0.561	0.0260
	NM2/M	0.005	0.0610	-0.229	0.0533	-0.229	0.0499
	M/Ex4	0.772	0.0762	0.772	0.0256	0.772	0.0254
	Ex4/Ex5	1.521	0.0436	1.521	0.0213	NA	NA
8	NM1/NM2	-0.434	0.0179	-0.461	0.0223	-0.554	0.0211
	NM2/M	-0.276	0.0548	-0.348	0.0138	-0.348	0.0130
	M/Ex4	0.816	0.0688	0.806	0.0617	0.834	0.0624
	Ex4/Ex5	1.396	0.0315	1.396	0.0121	NA	NA

Science		Round 1		Round 2		Round 3	
Grade	Level	Median	SE of Median	Median	SE of Median	Median	SE of Median
3	NM1/NM2	-0.421	0.1617	-0.661	0.1612	-1.410	0.1199
	NM2/M	0.321	0.1066	0.321	0.0497	0.321	0.0470
	M/Ex4	1.438	0.0617	1.393	0.0563	1.293	0.0554
	Ex4/Ex5	1.594	0.0188	1.594	0.0110	NA	NA
4	NM1/NM2	-0.151	0.0350	-0.219	0.0414	-0.392	0.0861
	NM2/M	0.264	0.0884	0.179	0.0562	0.179	0.0421
	M/Ex4	1.581	0.1162	1.909	0.0938	1.909	0.0272
	Ex4/Ex5	2.102	0.0230	2.210	0.0199	NA	NA
5	NM1/NM2	-0.334	0.0594	-0.548	0.0511	-0.548	0.0389
	NM2/M	0.182	0.0546	0.182	0.0367	0.106	0.0384
	M/Ex4	1.408	0.0600	1.360	0.0323	1.360	0.0404
	Ex4/Ex5	1.776	0.0314	1.776	0.0302	NA	NA
6	NM1/NM2	0.038	0.0927	-0.562	0.0834	-0.562	0.0557
	NM2/M	0.537	0.0611	0.473	0.0529	0.227	0.0375
	M/Ex4	1.044	0.0738	1.087	0.0688	1.588	0.0704
	Ex4/Ex5	1.676	0.0100	1.721	0.0113	NA	NA
7	NM1/NM2	-0.357	0.0461	-0.447	0.0194	-0.447	0.0229
	NM2/M	-0.089	0.1193	-0.091	0.0858	-0.089	0.0669
	M/Ex4	1.082	0.0768	1.082	0.0508	1.226	0.0327
	Ex4/Ex5	1.516	0.0371	1.598	0.0338	NA	NA
8	NM1/NM2	-0.371	0.0572	-0.492	0.0239	-0.554	0.0206
	NM2/M	0.208	0.0597	-0.061	0.0667	-0.125	0.0854
	M/Ex4	1.109	0.0546	1.072	0.0354	1.072	0.0430
	Ex4/Ex5	1.511	0.0440	1.511	0.0305	NA	NA

Social Studies		Round 1		Round 2		Round 3	
Grade	Level	Median	SE of Median	Median	SE of Median	Median	SE of Median
3	NM1/NM2	-0.140	0.1711	-0.243	0.1737	-0.327	0.0008
	NM2/M	0.333	0.0993	0.168	0.0320	0.329	0.0241
	M/Ex4	1.170	0.0990	1.109	0.0000	1.231	0.0179
	Ex4/Ex5	1.523	0.0600	1.979	0.0549	NA	NA
4	NM1/NM2	-0.146	0.0897	-0.492	0.0558	-0.492	0.0282
	NM2/M	0.281	0.0944	0.281	0.0428	0.150	0.0168
	M/Ex4	1.114	0.0367	1.114	0.0292	1.114	0.0130
	Ex4/Ex5	1.467	0.0299	1.718	0.0423	NA	NA
5	NM1/NM2	-0.207	0.0551	-0.063	0.0352	-0.207	0.0373
	NM2/M	0.536	0.0663	0.499	0.0552	0.480	0.0472
	M/Ex4	1.330	0.0467	1.374	0.0384	1.374	0.0331
	Ex4/Ex5	1.619	0.0171	1.671	0.0059	NA	NA
6	NM1/NM2	0.075	0.0532	-0.056	0.0592	-0.056	0.0249
	NM2/M	0.572	0.0377	0.488	0.0260	0.488	0.0102
	M/Ex4	1.310	0.0401	1.087	0.0417	1.087	0.0375
	Ex4/Ex5	1.412	0.0087	1.412	0.0062	NA	NA
7	NM1/NM2	-0.227	0.0528	-0.227	0.0393	-0.242	0.0370
	NM2/M	0.437	0.0772	0.437	0.0540	0.437	0.0532
	M/Ex4	1.060	0.0578	1.060	0.0559	1.085	0.0403
	Ex4/Ex5	1.277	0.0238	1.43	0.0212	NA	NA
8	NM1/NM2	-0.228	0.0369	-0.403	0.0125	-0.403	0.0097
	NM2/M	0.456	0.0549	0.456	0.0504	0.244	0.0465
	M/Ex4	0.855	0.0568	0.855	0.0551	0.855	0.0563
	Ex4/Ex5	1.156	0.0422	1.445	0.0333	NA	NA

Appendix D: Impacts by Round

Reading and Research	Not Met 1	Not Met 2	Met	Exemplary	Exemplary 4	Exemplary 5
Grade 3						
Round 1	12.8	27.5	24.3	35.4	19.0	16.4
Round 2	12.8	27.5	24.3	35.4	14.7	20.7
Round 3	12.8	27.5	24.3	35.4	NA	NA
Grade 4						
Round 1	10.4	18.8	35.4	35.4	5.3	30.1
Round 2	10.4	18.8	30.3	40.5	5.3	30.1
Round 3	10.4	18.8	35.4	35.4	NA	NA
Grade 5						
Round 1	9.6	22.1	39.3	29.0	12.2	23.0
Round 2	9.6	17.7	37.5	35.2	12.2	23.0
Round 3	9.6	17.7	37.5	35.2	NA	NA
Grade 6						
Round 1	15.4	16.5	47.4	20.7	16.4	15.6
Round 2	10.8	17.4	34.2	37.6	16.4	15.6
Round 3	10.8	17.4	39.8	32.0	NA	NA
Grade 7						
Round 1	12.5	15.8	35.7	36.0	5.3	30.7
Round 2	14.4	13.9	25.7	46.0	10.8	25.2
Round 3	16.4	11.9	35.7	36.0	NA	NA
Grade 8						
Round 1	15.1	24.9	39.9	20.1	7.6	12.5
Round 2	15.1	17.3	47.5	20.1	7.6	12.5
Round 3	15.1	17.3	47.5	20.1	NA	NA

Writing	Not Met 1	Not Met 2	Met	Exemplary	Exemplary 4	Exemplary 5
Grade 3						
Round 1	8.0	30.9	42.2	18.9	17.5	13.1
Round 2	8.0	23.1	38.3	30.6	17.5	13.1
Round 3	8.0	23.1	38.3	30.6	NA	NA
Grade 4						
Round 1	15.1	22.5	31.9	30.5	11.7	14.3
Round 2	4.2	25.8	44.0	26.0	11.7	14.3
Round 3	4.2	25.8	44.0	26.0	NA	NA
Grade 5						
Round 1	5.8	17.6	51.2	25.4	22.9	7.1
Round 2	5.8	17.6	46.6	30.0	22.9	7.1
Round 3	4.9	18.5	46.6	30.0	NA	NA
Grade 6						
Round 1	5.9	31.3	40.7	22.1	11.9	10.2
Round 2	5.9	23.9	48.1	22.1	11.9	10.2
Round 3	5.9	23.9	48.1	22.1	NA	NA
Grade 7						
Round 1	3.9	29.7	36.6	29.8	6.9	19.2
Round 2	15.4	22.0	32.8	29.8	12.9	13.2
Round 3	8.1	25.5	40.3	26.1	NA	NA
Grade 8						
Round 1	3.6	32.7	45.6	18.1	6.7	11.4
Round 2	3.6	32.7	45.6	18.1	9.6	8.5
Round 3	3.6	32.7	45.6	18.1	NA	NA

Mathematics	Not Met 1	Not Met 2	Met	Exemplary	Exemplary 4	Exemplary 5
Grade 3						
Round 1	14.3	18.8	35.8	31.1	11.1	20.0
Round 2	14.3	18.8	35.8	31.1	11.1	20.0
Round 3	14.3	18.8	35.8	31.1	NA	NA
Grade 4						
Round 1	16.4	12.5	39.9	31.2	14.6	16.6
Round 2	14.2	14.7	39.9	31.2	14.6	16.6
Round 3	14.2	14.7	39.9	31.2	NA	NA
Grade 5						
	8.9	32.5	30.7	27.9	17.8	10.1
Round 2	8.9	23.3	39.9	27.9	17.8	10.1
Round 3	8.9	23.3	39.9	27.9	NA	NA
Grade 6						
Round 1	31.9	18.8	28.7	20.6	9.8	15.7
Round 2	22.3	20.2	32.0	25.5	7.4	18.1
Round 3	22.3	9.6	42.6	25.5	NA	NA
Grade 7						
Round 1	24.3	18.6	28.1	29.0	16.5	12.5
Round 2	24.3	9.2	37.5	29.0	16.5	12.5
Round 3	18.7	14.8	37.5	29.0	NA	NA
Grade 8						
Round 1	37.2	5.5	33.7	23.6	12.0	11.6
Round 2	34.4	5.6	36.4	23.6	12.0	11.6
Round 3	31.4	8.6	36.4	23.6	NA	NA

Science	Not Met 1	Not Met 2	Met	Exemplary	Exemplary 4	Exemplary 5
Grade 3						
Round 1	14.0	24.4	43.1	18.5	12.1	10.9
Round 2	9.7	28.7	43.1	18.5	12.1	10.9
Round 3	1.8	36.6	38.6	23.0	NA	NA
Grade 4						
Round 1	18.8	12.5	44.2	24.5	3.9	11.7
Round 2	16.3	11.5	56.6	15.6	7.4	8.2
Round 3	11.7	16.1	56.6	15.6	NA	NA
Grade 5						
Round 1	20.9	19.1	48.7	11.3	6.5	4.8
Round 2	14.6	25.4	48.7	11.3	6.5	4.8
Round 3	14.6	25.4	48.7	11.3	NA	NA
Grade 6						
Round 1	29.9	19.0	20.7	30.4	2.8	11.5
Round 2	12.4	36.5	20.7	30.4	2.8	11.5
Round 3	12.4	26.5	46.8	14.3	NA	NA
Grade 7						
Round 1	18.5	7.5	48.0	26.0	9.7	12.6
Round 2	14.1	11.9	48.0	26.0	9.7	12.6
Round 3	14.1	11.9	51.7	22.3	NA	NA
Grade 8						
Round 1	19.0	21.5	37.1	22.4	14.2	11.4
Round 2	16.7	15.0	42.7	25.6	14.2	11.4
Round 3	14.5	14.5	45.4	25.6	NA	NA

Social Studies	Not Met 1	Not Met 2	Met	Exemplary	Exemplary 4	Exemplary 5
Grade 3						
Round 1	32.2	14.2	29.3	24.3	10.5	13.8
Round 2	28.8	13.8	29.7	27.7	16.3	8.0
Round 3	25.5	20.9	29.3	24.3	NA	NA
Grade 4						
Round 1	38.9	17.9	23.4	19.8	7.2	12.6
Round 2	23.7	33.1	23.4	19.8	11.5	8.3
Round 3	23.7	26.2	30.3	19.8	NA	NA
Grade 5						
Round 1	26.7	27.5	28.8	17.0	6.0	11.0
Round 2	33.1	21.1	28.8	17.0	6.0	11.0
Round 3	26.7	27.5	28.8	17.0	NA	NA
Grade 6						
Round 1	47.1	19.9	21.2	11.8	6.5	9.9
Round 2	40.3	23.7	19.6	16.4	6.5	9.9
Round 3	40.3	23.7	19.6	16.4	NA	NA
Grade 7						
Round 1	37.0	25.4	16.7	20.9	4.1	14.6
Round 2	37.0	25.4	16.7	20.9	6.1	12.6
Round 3	37.0	25.4	18.9	18.7	NA	NA
Grade 8						
Round 1	36.2	31.3	14.4	18.1	7.3	10.8
Round 2	30.2	37.3	14.4	18.1	12.9	5.2
Round 3	30.2	27.9	23.8	18.1	NA	NA


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